



DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Parts 127, 154, and 156

[Docket No. USCG-2020-0315]

RIN 1625-AC61

Electronic Submission of Facility Operations and Emergency Manuals

AGENCY: Coast Guard, DHS.

ACTION: Final rule.

SUMMARY: This final rule enables regulated facilities to electronically submit Operations Manuals and Emergency Manuals and electronically communicate with the Coast Guard. This rule also allows facility operators to submit one electronic or printed copy of the manuals and one electronic or printed copy of the amendments to the manuals. Finally, this rule requires the regulated facilities to maintain either an electronic or a printed copy of each required manual in the marine transfer area of the facility during transfer operations.

DATES: This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: To view comments and documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov>, type USCG-2020-0315 in the search box and click “Search.” Next, in the Document Type column, select “Supporting & Related Material.”

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SUPPLEMENTARY INFORMATION:

Table of Contents for Preamble

- I. Abbreviations
- II. Basis and Purpose, and Regulatory History
- III. Discussion of Comments and Changes from the Proposed Rule
- IV. Discussion of the Final Rule
 - A. Part 127—Waterfront facilities handling liquefied natural gas and liquefied hazardous gas
 - B. Part 154—Facilities transferring oil or hazardous materials in bulk
 - C. Part 156—Oil and hazardous material transfer operations
 - D. Technical revisions within Part 127 and Part 154
- V. Regulatory Analyses
 - A. Regulatory Planning and Review
 - B. Small Entities
 - C. Assistance for Small Entities
 - D. Collection of Information
 - E. Federalism
 - F. Unfunded Mandates
 - G. Taking of Private Property
 - H. Civil Justice Reform
 - I. Protection of Children
 - J. Indian Tribal Governments
 - K. Energy Effects
 - L. Technical Standards
 - M. Environment

I. Abbreviations

BLS	Bureau of Labor Statistics
CFR	Code of Federal Regulations
CG-FAC	U.S. Coast Guard Office of Port and Facility Compliance
COTP	Captain of the Port
DHS	Department of Homeland Security
FR	Federal Register
FWPCA	Federal Water Pollution Control Act
IT	Information technology
LHG	Liquefied Hazardous Gas
LNG	Liquefied Natural Gas
MISLE	Marine Information for Safety and Law Enforcement
MTR facilities	Marine Transportation-Related facilities that transfer oil or hazardous material in bulk
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
NPRM	Notice of proposed rulemaking
OMB	Office of Management and Budget
PIC	Person in Charge
RA	Regulatory analysis
SBA	Small Business Administration
§	Section
SME	Subject matter expert
UPS	United Parcel Service
U.S.C.	United States Code

II. Basis and Purpose, and Regulatory History

Section 70011 of Title 46 of the United States Code (U.S.C.) authorizes the Secretary of the Department of Homeland Security (DHS) to establish procedures, standards, and measures for the handling of dangerous substances, including oil and hazardous material, to prevent damage to any structure on or in the navigable waters of the United States. Additionally, the Federal Water Pollution Control Act (FWPCA), as amended and codified in 33 U.S.C. 1321(j)(5), requires the President to establish regulations requiring response plans for the prevention of discharges of oil and hazardous substances from vessels, onshore facilities, and offshore facilities. The FWPCA functions in 33 U.S.C. 1321(j)(5) have been delegated from the President to the Secretary of the DHS by Executive Order 12777 Sec. 2(d)(2) (Volume 56 of the **Federal Register** (FR) at Page 54757, Oct. 23, 1991), as amended by Executive Order 13286 (68 FR 10619, March 5, 2003). The authorities in 33 U.S.C. 1321(j)(5) and 46 U.S.C. 70011 (formerly 33 U.S.C. 1225) have been delegated to the Coast Guard under section II, paragraphs 70 and 73, of DHS Delegation No. 00170.1, Revision No. 01.2.

Title 33 of the Code of Federal Regulations (CFR) part 127 requires facilities that transfer liquefied natural gas (LNG), or liquefied hazardous gas (LHG) in bulk, to or from a vessel, to maintain both an Operations Manual and an Emergency Manual. Similarly, part 154 requires facilities that transfer oil or hazardous materials in bulk (MTR facilities), to or from a vessel with a capacity of 39.75 cubic meters (250 barrels) or more, to maintain an Operations Manual. According to 33 CFR 127.019, 154.300, and 154.325, two copies each of the Operations Manual and the Emergency Manual must be submitted to the Captain of the Port (COTP) of the zone in which the facility is located for examination before a facility may operate. Lastly, part 156 describes the requirements for transferring of oil or other hazardous materials on the navigable waters or contiguous zone of the United States to, from, or within each vessel with a capacity of 39.75 cubic

meters (250 barrels) or more.

The COTP evaluates whether the operations and safety procedures outlined in the manuals meet the requirements for applicable facilities in 33 CFR part 127 (for LNG and LHG) or parts 154 and 156 (for the transfer operations of oil or hazardous material). If the procedures in the manuals meet the requirements, then the COTP returns one copy of each manual, marked “Examined by the Coast Guard.”

As stated in the notice of proposed rulemaking (NPRM) titled “Electronic Submission of Facility Operations and Emergency Manuals,” published November 27, 2020 (85 FR 75972), the purpose of this rulemaking is to allow facility operators to submit and maintain the Operations Manual and Emergency Manual in either print or electronic format. The comment submissions received on the NPRM expressed general support for allowing electronic submissions and the proposed changes. Therefore, this final rule implements the changes proposed in the NPRM with clarifying edits, as explained in section III of this rule.

Although the previous regulations did not explicitly state that the manuals had to be printed, the previous regulatory requirement for the owner or operator to submit two copies and for the COTP to return one marked copy suggested the use of printed documents. The Coast Guard issued the two-copy requirement for LNG and LHG facilities in 1988 (53 FR 3370, February 5, 1988) and for oil and hazardous materials facilities in 1996 (61 FR 41458, August 8, 1996), when electronic mail and electronic storage were not common practice. This final rule removes the two-copy requirement and allows facility operators to submit one printed or electronic copy of each required manual to the COTP for examination. It also allows facilities to maintain either a printed or an electronic copy of the most recently examined manual(s) in the marine transfer area of the facility.

III. Discussion of Comments and Changes from the Proposed Rule

The Coast Guard received four comment submissions during the NPRM's 60-day comment period that ended January 27, 2021. All four of the commenters supported the proposed change to allow electronic submission and communication regarding Facility Operations Manuals and Emergency Manuals.

Three of the commenters requested that we consider expanding the use of electronic submission, digital tools, and electronic storage to other documents required by regulation. Currently, electronic submission capability exists for the submission of Facility Security Plans for facilities regulated under 33 CFR part 105. The NPRM only proposed and requested comments on allowing electronic submission of Facility Operations Manuals and Emergency Manuals under parts 127 and 154. The Coast Guard is exploring the long-term feasibility of expanding this capability beyond the current requirements, but that is beyond the scope of this rulemaking.

One commenter concurred that all manuals and other written material could be sent electronically, but recommended keeping a printed version readily available and accessible for team members carrying out assignments at the facility. The Coast Guard wants to allow flexibility for facility operators to choose which format is appropriate based on the physical characteristics and operating procedures of their specific facility. While this commenter did not provide reasons why allowing electronic copies at the facility would be inadequate or unsafe, the Coast Guard wants to make it clear that there are existing electrical safety standards that apply to the electronic devices used to display electronic copies of the manuals. In response to this comment, and upon further deliberation, we realize that the text allowing electronic manuals in the marine transfer area could benefit from clarification to help the facilities safely adopt the electronic viewing option. This final rule adds an additional statement to the proposed regulatory text that electronic devices used to display electronic manuals must meet applicable electrical safety standards in the applicable CFR part.

Parts 127 and 154 have electrical safety standards for these facilities that are applicable to electronic devices used in a facility. By adding this regulatory text, we are clarifying that allowing electronic viewing and storage of the Facility Operations Manuals or Emergency Manuals does not circumvent those safety requirements. The Coast Guard anticipates that some facilities will still have printed manuals at their operations stations; those facilities will not be required to maintain an electronic copy under this final rule. We have taken this into account in our cost savings calculations by using data on how many facilities will use electronic and printed manuals.

We are making three changes to the regulatory text we proposed in the NPRM. First, as noted above, in paragraphs 127.309(a), 127.1309(a), and 154.300(f), we add a statement that electronic devices used to display the electronic manuals must meet applicable safety standards in the part. Second, we specify that the requirement for facilities to include identifying information on manual submissions must be revision-specific identifying information, to help the Coast Guard and the facility identify the most recently examined manual. In paragraphs 127.019(c) and (d), 154.300(a)(4) and (e), 154.320(e), and 154.325(c), we changed the proposed text, “identifying information generated by the facility,” to “revision-specific identifying information.” With respect to the revision-specific identifying information, we are also removing the proposed text, “generated by the facility.” The Coast Guard does not intend to limit who can create the revision-specific identifying information. As we discuss in section IV of this preamble, the purpose of requiring facilities to include the publication date, revision date, or other revision-specific identifying information on the manual submissions is so that the Coast Guard and the facility can identify the most recently examined version of the manual. Requiring the identifying information to be revision-specific will help achieve that purpose.

The third change from the NPRM regulatory text is in paragraph 156.120(t)(2),

which is the existing requirement for maintaining Facility Operations Manuals and vessel transfer procedures at the facility. After publication of the NPRM, we realized that the proposed text inadvertently allowed electronic copies of vessel transfer procedures, which is in conflict with existing § 155.740. Section 155.740, paragraphs (b) and (c), require that vessel transfer procedures be printed and posted for viewing. The NPRM only discussed allowing electronic copies for the Facility Operations Manuals; we do not intend to allow electronic copies for vessel transfer procedures. Because print or electronic copies of the Facility Operations Manuals will be expressly permitted by new § 154.300, this final rule revises paragraph 156.120(t)(2) from the version in the NPRM to say that “copies” instead of “print or electronic copies” of the Facility Operations Manual and vessel transfer procedures must be available for viewing in the marine transfer area. This change in text will ensure the section does not conflict with the printed copy requirement for vessel transfer procedures in § 155.740.

IV. Discussion of the Final Rule

This final rule amends the following sections in title 33 of the CFR: 127.019, 127.309, 127.1309, 154.300, 154.320, 154.325, and 156.120. A section-by-section explanation of the new requirements follows.

A. Part 127—Waterfront facilities handling liquefied natural gas and liquefied hazardous gas.

Section 127.019 Operations Manual and Emergency Manual: Procedures for examination.

This section will allow owners and operators of facilities that transfer LNG and LHG, in bulk, to or from a vessel to submit one print or electronic copy of their Operations Manual and Emergency Manual to the COTP for examination.

Additionally, to codify current practices, manuals submitted after the effective date of the final rule must include a date, revision date, or other revision-specific

identifying information. All manuals currently contain unique identifying information. Paragraph (c) of this section will allow them to continue to use their own identifying information or to use a revision date. The date, revision date, or other revision-specific identifying information, such as document control numbers, will allow the facility operator and the Coast Guard to determine quickly if the most recent version of the manual is being used.

As specified in paragraph (d) of this section, the COTP will respond to the facilities electronically to reduce paperwork-processing costs. Under this rule, the COTP will provide notice to the facility that the manual has been examined, and will no longer return a marked copy of the manual to the facility.

The COTP will determine the best method to return the notice to the facility operator by considering the facility's available contact information and the method in which the manuals were submitted. We expect the COTP's notice will initially take the form of a printed or electronically submitted letter to the facility operator, but could eventually include an electronic certification with the information. The COTP's notice will also include the manual's date, revision date, or other revision-specific identifying information so that the Coast Guard and facility operators can verify which manual is the most recently examined.

Per paragraph (e), the COTP will notify a facility with an explanation of why a manual does not meet the requirements of this part, without having to return a printed copy. This enables electronic communication between the Coast Guard and a facility while reducing associated printing and mailing costs for the Coast Guard. The COTP retains the discretion to send the letters and manuals via mail to the facility when appropriate.¹

¹ We use the term "mail" throughout this final rule to refer to the delivery method used by the COTP or the facility to send and receive printed copies of letters and manuals. These methods include, but are not limited to, the United States Postal Service, FedEx, United Parcel Service (UPS), and courier.

Finally, within § 127.019, as proposed in the NPRM, this rule removes the word “existing” where it appears in the context of “existing facility” in paragraphs (a) and (b). “Existing,” as applied to a waterfront facility, is defined in § 127.005, but the definition is limited to facilities that were constructed before June 2, 1988 for LNG facilities, and before January 30, 1996 for LHG facilities. The specific dates used within the definition of “existing” were never intended to apply to the use of “existing” in this section. To avoid confusion, we are removing “existing” from this section. The requirements in paragraph (a) will continue to apply to all active facilities, and the requirements of paragraph (b) will continue to apply to all new or inactive facilities.

Section 127.309 Operations Manual and Emergency Manual: Use.

Paragraph (a), in subpart B for waterfront facilities handling LNG, will require the operator to ensure that the person in charge (PIC) has either a printed or an electronic copy of the most recently examined Operations Manual and Emergency Manual readily available in the marine transfer area. In this paragraph, we added a statement beyond what was proposed in the NPRM to clarify that electronic devices used to view an electronic copy of the manuals must comply with applicable electrical safety requirements in part 127.

In § 127.309, the phrase “readily available in the marine transfer area” means that a printed or electronic copy of the manual is available for viewing within the operating station of the PIC. The PIC is not expected to keep the manual in their possession while conducting routine rounds during a transfer operation.

While PICs must know the contents of the manuals under paragraph 127.301(a)(4), the Coast Guard recognizes that it is difficult for a PIC to instantly recall every step of every procedure outlined in these manuals. Because both paragraphs 127.309(b) and (c) require each transfer and emergency operation to be conducted in accordance with the examined Operations Manuals and Emergency Manuals,

respectively, it has been common practice for PICs to have a copy of the Operations Manual and Emergency Manual in the marine transfer area during transfer operations to reference when needed. Therefore, adding a requirement that a printed or electronic copy of the most recently examined Operations Manual and Emergency Manual must be readily available to the PIC in the marine transfer area does not add a significant burden to facility operators.

Section 127.1309 Operations Manual and Emergency Manual: Use.

Section 127.1309(a) in subpart C for waterfront facilities handling LHG requires that the facility operators ensure the facility's PIC has a printed or electronic copy of the most recently examined Operations Manual and Emergency Manual readily available in the marine transfer area. This requirement in paragraph (a) will help ensure that PICs have access to the manuals when needed, since there may be fewer printed copies available when facilities opt into electronic manual submission. For the purpose of this section, the phrase "readily available in the marine transfer area" means a printed or electronic copy of the manual is available for viewing within the operating station of the PIC, but the PIC is not expected to keep the manual in their possession. With this final rule, we also added a statement to paragraph (a) to clarify that electronic devices used to view the electronic copy of the manuals must comply with applicable electrical safety requirements in part 127.

B. Part 154—Facilities transferring oil or hazardous materials in bulk.

Section 154.300 Operations Manual; General

The revised § 154.300 allows facility operators to submit one printed or electronic copy of the Operations Manual to the COTP with a date, a revision date, or other revision-specific identifying information such as a document control number generated by the facility. This allows the facility and the COTP to determine quickly during inspections if the facility is using the most recent version of the manual. As the inclusion

of such information is current practice, we are only codifying this current practice.

As proposed in the NPRM, in paragraph (a) we clarify that the facility operator must submit the manuals to the COTP of the zone in which the facility operates. The clarification will align the text with current practice.

This rule implements the proposed changes to how the COTP notifies the facility that the Operations Manual has been examined in paragraph (e). Previously, after examination and determination that the manual meets the requirements of this part, the COTP marked the manual “Examined by the Coast Guard” and returned one copy to the facility operator. Now the COTP will notify the facility that the manual has been examined and will not return a copy of the manual to the facility. We expect this notice to initially take the form of a printed or emailed letter, with the revision date or other revision-specific identifying information on the letter, but could eventually include an electronic certification with this information.

Paragraph (f) of § 154.300 allows either a printed or electronic copy of the most recently examined Operations Manual to be readily available for each facility’s PIC while conducting a transfer operation. The facility may store the manual in print or electronic format. In this paragraph, this final rule adds a new statement over what we originally proposed in the NPRM, specifying that electronic devices used to view an electronic copy of the manual must comply with applicable electrical safety requirements in part 154. The facility may have either printed or electronic copies of the manual in any translations required under existing paragraph (a)(3).

In § 154.300(d), “products transferred” will also be part of the list of items the COTP considers when determining whether the manual meets the requirements of part 154 and part 156. Information about the products transferred, meaning the type of oil and hazardous material, is already required to be included in the Operation Manuals under § 154.310(a)(5), and knowledge of the products being transferred is important to reviewing

the adequacy of the Operations Manual. The facility develops their capabilities based, in part, on the characteristics of the oil or hazardous material they want to transfer. Including “products transferred” in the list of considerations increases transparency regarding the manual examination process.

Section 154.320 Operations Manual: Amendment.

This section addresses amendments to Operations Manuals. Paragraph (a) of this section previously stated that the COTP may require the facility operator to amend their Operations Manual if the manual does not meet the requirements of this part. This rule replaces “requirements of this part” with “requirements of this subchapter” because there are other regulations in the subchapter that apply to the Operations Manual. The applicable subchapter is subchapter O, titled “Pollution,” which includes 33 CFR parts 151 through 159.

Section 154.320(a)(1) allows facility operators to submit to the Coast Guard any information, views, arguments, and proposed amendments in response to the inadequacies identified by the COTP. To align with other revisions, we added language to this section allowing facility operators to send their information, views, arguments, and proposed amendments to the COTP in print or electronically.

Per paragraph (b)(1), facilities may submit amendments to the manuals to the COTP either in print or electronically. Paragraphs (b)(2) and (c) require the COTP to examine the amendments to an Operations Manual for compliance with the subchapter and then notify the facility that the Coast Guard has examined the amendments. If the amendments do not meet the requirements for Operations Manuals in subchapter O, the COTP will notify the facility operator of the inadequacies and explain why the amendments do not meet the requirements of the subchapter. The COTP notice may be a printed or emailed letter, or even an electronic certification, with the revision date or other revision-specific identifying information included.

Paragraph (e) describes how facility operators may submit amendments and the procedures to follow in the event the entire manual is submitted for amendments. This rule gives the facility operator the choice of page or whole-manual replacement, but requires them to include the date, revision date, or other revision-specific identifying information on the submission. If a facility submits the entire manual with the proposed amendments, this rule requires that the changes since the last examined manual be highlighted, or otherwise annotated. It may be easier for a facility to submit the entire manual with the amendments highlighted or annotated, rather than isolating individual pages that were amended. Examples of ways facility operators could highlight or annotate the amendments include, but are not limited to, use of an electronic or ink highlighting tool, comment or text boxes noting where the changes are, or noting the changes in correspondence or a document. Ultimately, the method that the facility operator uses can be anything that identifies all the changes, and is not limited to the methods mentioned in this preamble. The purpose of highlighting or annotating the amendments is to assist the COTP in understanding what changes are being made and to reduce the resources required to examine amendments. After the COTP examines the amendments, the facility must maintain the Operations Manual with the most recently examined changes, but there is no requirement to keep the changes highlighted or annotated after they are examined.

Section 154.325 Operations Manual: Procedures for examination.

This rule removes paragraph (a) of § 154.325, so that the facility operator is no longer required to submit two copies of the Operations Manual. To align with other changes in part 154, the facility operator of a new facility will be able to submit one electronic or printed copy of the Operations Manual to the COTP.

In re-designated paragraphs (a) and (b) of this section, this rule replaces the previous text, “any transfer operation” with, “the first transfer operation” to make the

regulatory text more precise. This clarifies that the facility must submit the Operations Manual prior to a new facility's first transfer or the first transfer after a facility is removed from caretaker status.

We also amended the process in § 154.325 to require the COTP to notify the facility operator when the manual has been examined. Because we are allowing electronic submission in this final rule, the COTP will no longer send back a marked printed copy of the manual stating it has been examined by the Coast Guard. The COTP's notice will restate the manual's date, revision date, or other identifying information provided by the facility. If the manual does not meet the requirements of subchapter O, the COTP will notify the facility with an explanation of why the manual does not meet the requirements of that subchapter.

In paragraph (d) of § 154.325 (previously paragraph (e) of § 154.325), this final rule replaces the text "requirements of this chapter" with "requirements of this subchapter" because referencing the entire chapter is too broad. The applicable regulations are in this subchapter O, which includes 33 CFR parts 151 through 159.

C. Part 156—Oil and hazardous material transfer operations

Section 156.120 Requirements for transfer.

Part 156 contains regulations related to oil and hazardous material transfer operations. In accordance with other changes made by this rule, in paragraph 156.120(t)(2), the PIC must have a copy of the most recently examined facility Operations Manual readily available in the marine transfer area. For the purpose of this section, "readily available in the marine transfer area" means that a printed or electronic copy of the manual is available for viewing within the operating station of the PIC. The PIC is not expected to keep the manual in their possession while conducting routine rounds during the transfer operation.

D. Technical revisions within Part 127 and Part 154.

As proposed in the NPRM, we replace uses of the word “shall” with “must” when specifying the actions facility operators are required to perform. This helps align the regulations with plain language guidelines. Additionally, where the COTP is required to respond to or notify a facility, we replace “the COTP shall” with “the COTP will” to state clearly what the COTP will do in certain cases. This helps clarify what the facility operators can expect from the COTP and aligns the regulations with plain language guidelines. These technical revisions do not change the requirements for facility operators or the Coast Guard.

V. Regulatory Analyses

We developed this rule after considering numerous statutes and Executive orders related to rulemaking. A summary of the analysis based on these statutes and Executive orders follows.

A. Regulatory Planning and Review

Executive Orders 12866 (Regulatory Planning and Review) and 13563 (Improving Regulation and Regulatory Review) direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying costs and benefits, reducing costs, harmonizing rules, and promoting flexibility.

The Office of Management and Budget (OMB) has not designated this rule a significant regulatory action under section 3(f) of Executive Order 12866. Accordingly, OMB has not reviewed it. A regulatory analysis (RA) follows. The first section of this RA covers the alternatives considered, the second covers the affected population, the third covers the costs, the fourth covers the cost savings components, and the fifth provides a summary of the costs savings.

As stated previously under our discussion of public comments, we received four comments. Three of these comments supported the implementation of electronic documentation in the proposed rulemaking as well as in other rulemakings. An anonymous fourth commenter stated that they would like to see all documents submitted electronically and kept in that form until approved by the Coast Guard, but kept in printed form after approval.² In response to this, the final rule gives the facility operators, *at their discretion*, the flexibility to keep that documentation in either print or electronic form. We believe that the facility operators would best be suited to decide which format they would prefer, based on the particular circumstances of their specific facilities. Forcing facilities to use only printed documentation prevents facilities from realizing any cost savings from the use of digital documentation. Hence, in this final rule, we allow facility operators the choice.

There are four differences in this RA from the RA in the NPRM that have a quantified monetary impact. The first two involve updated financial data. The NPRM used the most up-to-date wage data available when it was written and what were then current costs to mail documents. More up-to-date wage data are now available,³ and the costs of mailing documents has changed between the time the NPRM was written and this final rule. A detailed breakdown of mailing costs, labor handling costs associated with mailing those documents, and aggregated shipping and handling costs (the combined cost of both) can be found in table 9. That table shows mailing costs have changed in a mixed manner, with the cost associated with mailing some documents going up and

² The commenter wrote, “I would recommend that all Manuals and others [sic] written material to be submitted electronically (including if the written material needs to be amended) until the final approval of the Manuals and/or other documents, which then could be printed for the required establishments. I also recommend keeping a printed version (not electronic) readily available and accessible for team members that are carrying out assignments.”

³ For example, wage data for the NPRM was taken from the May 2019 National Industry-Specific Occupational Employment and Wage Estimates, while for the final rule the data were taken from the May 2020 National Industry-Specific Occupational Employment and Wage Estimates. The fully burdened wages of in-scope employees rose from \$30.28 for LNG/LHG employees and \$100.03 for MTR facility employees in the NPRM, to \$32.19 and \$106.82, respectively, in the final rule.

others going down. The price of labor associated with mailing documents has increased across all document groups, and aggregated shipping and handling costs (the combination of both) have increased in four of the six document categories. In aggregate, private sector cost savings associated with shipping and handling, costs have increased from \$14,530 in the NPRM to \$15,323 in the final rule.⁴

The other two differences involve the handling of manuals and amendments that the COTP finds to be inadequate. We now estimate that, under current regulations, when the COTP finds an Operations Manual or Emergency Manual or amendment to be inadequate, the facility operator sends two copies of the document back to the COTP instead of the one copy originally assumed by the NPRM.⁵ The final difference is that in this final rule we estimate that, under current regulations, the COTP sends a facility one stamped copy of an Operations Manual or Emergency Manual or amendment after it has been modified to remedy an inadequacy and been deemed acceptable by the COTP. In the NPRM economic analysis, we incorrectly stated that no copies were sent back in such cases, when, in fact, the COTP does send back one copy.⁶ We discuss these four new in more detail in the cost savings section of this RA.

Other than these four modifications, there are no substantive changes to the requirements and calculations originally proposed in the NPRM. We made clarifying edits to the regulatory text, as noted in the Discussion of Comments and Changes from the Proposed Rule section of this preamble, which do not have any impact on the costs or benefits from what we proposed in the NPRM.

This rule provides administrative paperwork burden relief for operators of LNG/LHG and MTR facilities, as the use of electronic documentation (as opposed to

⁴ See table 2, specifically the aggregate of the rows “savings from not having to mail manuals (and amendments) to the COTP” by LNG/LHG facilities and MTR facilities.

⁵ This change, from one copy to two copies, was made due to new information provided by Coast Guard subject matter experts (SMEs).

⁶ This change, from zero copies to one copy, was made due to new input from Coast Guard SMEs.

print) for Operations Manuals and Emergency Manuals, as well as associated amendments, will permit facilities to satisfy regulatory requirements at a lower cost. LNG and LHG facilities are required to submit Operations Manuals and Emergency Manuals and amendments, while MTR facilities are required to submit only Operations Manuals and amendments.

Under current regulations, facility operators are required to send two printed copies of each manual and set of amendments to the COTP. The final rule will permit these documents to be submitted electronically, at the discretion of the facility operators. Facility operators exercising this option will no longer need to assemble and mail printed versions, resulting in administrative cost savings. The final rule will also permit facility operators sending their documentation in print format to submit only one copy of their documents, resulting in further administrative cost savings.

Additionally, current regulations require those facility operators whose documents were not approved by the COTP to resubmit two copies of revised documents to the COTP in print format. As stated previously, in the NPRM's economic analysis we erroneously estimated that in the current regulations the facility only mailed back one revised copy to the COTP. This has been corrected in the economic analysis of the final rule.⁷ The annual cost associated with the additional manual that must be sent by those LNG/LHG and MTR facilities, which includes the costs of manufacturing the additional manuals and amendments as well as the shipping and handling associated, is \$1,056 per year and \$10,563.30 over a 10-year period (in nominal terms). The final rule will permit facility operators to resubmit their documents in either electronic or print format. Facility operators exercising the option to use an electronic format will no longer need to assemble and mail two printed versions, while those who decide to instead send printed

⁷ The cost difference between the NPRM and the final rule, accounted for by correctly estimating two manuals instead of erroneously estimating one, is \$1,056.33 per year (and \$10,563.30 over a 10-year period, in nominal terms).

documentation will only need to send one copy instead of two to the COTP. This reduction in paper documentation will result in additional administrative cost savings.

Finally, the final rule permits facilities to keep documentation at their facility's marine transfer area in either electronic or print format. Currently, this documentation must be kept in print format at these locations. According to Coast Guard SMEs from the Office of Port and Facility Compliance (CG-FAC), the typical facility has, on average, two marine transfer areas.⁸ LNG and LHG facilities are required to keep one copy of an Operations Manual and one copy of an Emergency Manual (and to keep each manual up-to-date with amendments) at each of their marine transfer areas. MTR facility operators are required to keep one Operations Manual (and amendments) at each marine transfer area. Those facility operators that exercise the option to use electronic documents instead of print will experience a benefit, in the form of a cost savings, resulting from no longer having to assemble these printed documents (one copy for each marine transfer area),⁹ as well as not having to physically place this documentation at the two marine transfer areas.¹⁰

The final rule also results in administrative cost savings to the Coast Guard. Currently, when the COTP examines an Operations Manual or Emergency Manual and finds it meets the regulatory requirements (or is "adequate"), they must return a stamped copy to the facility. Under the final rule, the COTP will not return a printed copy of the manual via mail. Instead, the COTP will send either a printed or an electronic message back to the facility stating that the Coast Guard has examined the manual.¹¹ As a result, the Coast Guard will experience cost savings from not having to handle and mail back to

⁸ Based on an SME assessment from CG-FAC. All Coast Guard SME input assessments mentioned in this final rule, unless stated otherwise, are from CG-FAC.

⁹ Each marine transfer area is saved one copy. However, as each facility has, on average, two marine transfer areas, each facility is saved two copies total.

¹⁰ These areas are not the same as the administrative offices of the facilities; hence, labor time needs to be expended to place manuals at the transfer areas after they are assembled.

¹¹ The Coast Guard envisions sending back an electronic format of the manual with an electronically stamped watermark, notification, or similar method.

the facility a stamped, printed version of the manual when the facility sends electronic documentation to the Coast Guard.

On the other hand, if the COTP finds “inadequacies” in the submitted manual, meaning the manual does not meet the regulatory requirements, the COTP must currently mail back a copy of the manual, or provide a notification, with annotations or comments specifying how to correct the manual.¹² Based on the requirements in the final rule, the COTP will be allowed to send an electronic or printed message, instead of only a notification in written form, explaining why the manual does not meet the requirements of the part. The COTP will not be obligated to send back any copies of the manual with their explanation for why the manual does not meet the requirements.

In addition, when the COTP receives corrected versions of the manual back from facilities, under current regulations, the COTP must send back to the facility one printed copy of the document. In the economic analysis contained in the NPRM, we had erroneously estimated that no printed copies of the corrected manual were sent back to the facility when the COTP finds the corrected manual adequate. This is corrected in the economic analysis contained in this final rule. As the final rule permits the Coast Guard to electronically notify facilities regarding whether their manuals are adequate or inadequate the Coast Guard will experience a cost savings.

In table 1, we show a summary of the impacts of the final rule. As a result of the previously discussed changes between this RA and the NPRM, the projected cost savings to industry and Coast Guard have increased from the analysis in the NPRM. The annualized and 10 year cost savings to industry, both discounted 7 percent, increased approximately 9 percent from the NPRM estimates of \$36,307 and \$255,007 to \$39,394 and \$276,689, respectively. The annualized and 10-year cost savings to the Coast Guard,

¹² The word “inadequacies” is used on numerous occasions in the text of the current regulation. Sections where the word is explicitly cited include paragraphs 154.320(a)(1) and 154.320(c)(2).

both discounted 7 percent, increased approximately 16 percent, from the NPRM estimates of \$7,426 and \$52,160 to \$8,616 and \$60,512, respectively. As a result, the aggregated annual and 10-year cost savings for both the private sector and the Coast Guard, discounted at 7 percent, increased approximately 10 percent, from \$43,734 and \$307,167 to \$48,010 and \$337,200, respectively.

Table 1. Summary of the Impacts of the Final Rule¹

Category	Summary
Applicability	<ul style="list-style-type: none"> • Updates 33 CFR parts 127 and 154 to permit regulated facilities to submit Operations Manuals and Emergency Manuals and amendments in electronic or printed format. • Updates 33 CFR parts 127 and 154 to permit regulated facilities that submit printed Operations Manuals and Emergency Manuals and amendments to submit only one copy in that format. • Updates 33 CFR parts 127 and 154 to permit the Coast Guard to send notices of adequacy or inadequacy to facilities electronically. • Updates 33 CFR parts 127, 154, and 156 to permit regulated facilities to store electronic² or printed versions of their Operations Manuals and Emergency Manuals and amendments at the marine transfer areas of their facilities.
Affected Population (Annually)	60 facilities that transfer LNG and LHG and 703 MTR facilities (total of 763 facilities) ³
Cost savings to Industry (\$2020, 7% discount rate)	10-year cost savings: \$276,689 Annualized: \$39,394
Cost savings to the Coast Guard (\$2020, 7% discount rate)	10-year cost savings: \$60,512 Annualized: \$8,616
Total Cost Savings (\$2020, 7% discount rate)	10-year cost savings: \$337,200 Annualized: \$48,010
¹ All dollar figures rounded to the closest whole dollar. ² Electronic versions at the marine transfer areas of facilities will be on electronic devices that must comply with applicable electrical safety standards. For more details, please see the earlier sections of the preamble to this final rule that discuss paragraphs 127.309(a), 127.1309(a), and 154.320(f). ³ Of the 60 LNG/LHG facilities, we assume 54 will submit their documentation in electronic format and 6 in print. Of the 703 MTR facilities, 527 are expected to submit their documents in electronic format and 176 in print. For a detailed discussion of these estimates and calculations, refer to the “Affected Population” section of this RA.	

Note: Numbers may not sum due to rounding.

A more detailed set of tables comparing the cost savings between the NPRM and the final rule is provided below. Table 2 shows a specific breakdown by each subset of cost savings between the NPRM and the final rule. Table 3 shows the differences between the two, on an aggregated basis (for the full 10-year period looking forward after the implementation of the rulemaking). Specific details on the derivation of the numbers

for the final rule are discussed later in the RA under the specific section for each cost element.

As can be seen in table 2, the factor most contributing to the private sector aggregate cost savings increase was, for MTR facilities, the savings from not having to produce printed manuals (and amendments) to mail to the COTP. This one cost savings element, \$1,944, accounted for approximately 63 percent of the aggregate increase in total private sector costs (of \$3,088). With respect to total cost savings for both the private sector and the government, \$4,278, two cost elements accounted for the overwhelming majority of the cost increase. Those two cost elements were, for MTR facilities, the cost savings from not having to produce printed manuals (and amendments) to mail to the COTP (accounting for 45 percent of the total increase of \$4,278) and, for the Coast Guard, the cost savings from not having to mail printed manuals (and amendments) back to facilities (accounting for 28 percent of the increase).

Table 2: Annual Cost Savings of Final Rule and NPRM Compared

Population	Cost Savings Element	Final Rule Annual Cost Savings	NPRM Cost Savings	Difference
LNG/LHG Facilities	Savings from not having to produce printed manuals (and amendments) to mail to the COTP.	\$579	\$498	\$81
	Savings from not having to produce printed manuals (and amendments) for placement at facility marine transfer areas.	\$242	\$234	\$8
	Savings from not having to mail manuals (and amendments) to the COTP.	\$1,011	\$994	\$17
	Savings from not having to place printed manuals (and amendments) at facility marine transfer areas.	\$1,634	\$1,605	\$29
Total Annual LNG/LHG Facility Cost Savings		\$3,466	\$3,331	\$135
MTR Facility	Savings from not having to produce printed manuals (and amendments) to mail to the COTP.	\$11,839	\$9,895	\$1,944
	Savings from not having to produce printed manuals (and amendments) for placements at facility marine transfer areas.	\$2,120	\$2,023	\$97
	Savings from not having to mail manuals (and amendments) to the COTP.	\$14,312	\$13,536	\$776
	Savings from not having to place printed manuals (and amendments) at facility marine transfer areas.	\$7,658	\$7,522	\$136
Total Annual MTR Facility Cost Savings		\$35,929	\$32,976	\$2,953
Total Private Sector Cost Savings		\$39,395	\$36,307	\$3,088
Coast Guard	Savings from not having to mail printed manuals (and amendments) back to facilities.	\$8,616	\$7,426	\$1,190
Total Annual Coast Guard Cost Savings		\$8,616	\$7,426	\$1,190
Total Private + Government Sector		\$48,011	\$43,733	\$4,278

Note: All numbers rounded to nearest whole number. Figures may not sum exactly due to rounding.

Table 3 shows the aggregated nominal and discounted (at 7%) differences, as well as cost savings on a discounted annualized rate (discounted 7%) by type of facility, for the entire private sector, the Coast Guard, and the private sector and Coast Guard combined. Cost savings differ between the final rule and NPRM for these aggregated figures from approximately 4 percent for LNG/LHG facilities to 9 percent for MTR facilities to 16 percent for the Coast Guard. For the entire private sector the difference is 9 percent, and for the combined private and public sectors it is 10 percent.

Table 3: Annual Cost Savings of Final Rule and NPRM Compared

	Final Rule	NPRM	Difference	% Difference (from NPRM)
LNG/LHG Facilities				
10-Year Nominal Cost Savings	\$34,652	\$33,309	\$1,343	4%
10-Year Cost Savings Discounted (7%)	\$24,338	\$23,394	\$944	4%
Annualized Cost Savings (Discounted at 7%)	\$3,465	\$3,331	\$134	4%
MTR Facilities				
10-Year Nominal Cost Savings	\$359,290	\$329,764	\$29,526	9%
10-Year Cost Savings Discounted (7%)	\$252,350	\$231,612	\$20,738	9%
Annualized Cost Savings (Discounted at 7%)	\$35,929	\$32,976	\$2,953	9%
Total Private Sector				
10-Year Nominal Cost Savings	\$393,942	\$363,073	\$30,869	9%
10-Year Cost Savings Discounted (7%)	\$276,689	\$255,007	\$21,682	9%
Annualized Cost Savings (Discounted at 7%)	\$39,394	\$36,307	\$3,087	9%
Coast Guard				
10-Year Nominal Cost Savings	\$86,155	\$74,264	\$11,891	16%
10-Year Cost Savings Discounted (7%)	\$60,512	\$52,160	\$8,352	16%
Annualized Cost Savings (Discounted at 7%)	\$8,616	\$7,426	\$1,190	16%
Total Private Sector + Government Sector				
10-Year Nominal Cost Savings	\$480,097	\$437,337	\$42,760	10%
10-Year Cost Savings Discounted (7%)	\$337,200	\$307,167	\$30,033	10%
Annualized Cost Savings (Discounted at 7%)	\$48,010	\$43,734	\$4,276	10%

Note: All numbers and percentages rounded to nearest whole number or percentage. Figures may not sum exactly due to rounding.

Alternatives Considered

We considered three alternatives. The first is a continuation of current regulations (no change). The second is a modification to the current regulations that would require all regulated facilities to submit their required Operations Manuals, Emergency Manuals, and amendments electronically. The third is giving regulated facilities flexibility to submit documentation in either electronic or printed format. We discuss each alternative in more detail in the following sections.

Alternative 1—No Change.

This alternative would require regulated facility operators to continue to submit two printed copies of the Operations Manuals and Emergency Manuals, and the COTP to continue to examine these manuals and return them by mail. This alternative would also require facility operators to maintain the manuals in a printed format near the marine transfer areas of their facilities. This alternative would not result in any cost savings to either industry or the Coast Guard. Therefore, we rejected alternative 1.

Alternative 2—All Electronic Format Submissions.

This alternative would amend regulations to require regulated facility operators to submit only electronic copies of the Operations Manuals and Emergency Manuals, and the COTP to examine these manuals (and amendments) and return them only through email or other electronic means. Facility operators would not be permitted the option of submitting printed documents. Facilities would have the discretion to keep Operations Manuals and Emergency Manuals in either printed or electronic format at their marine transfer areas.¹³

¹³ Electronic versions at the marine transfer areas of facilities will be on electronic devices that must comply with applicable electrical safety standards.

Facility operators may experience cost savings greater than projected under alternative 1 or the alternative chosen in this final rule (alternative 3) because they would be required to submit their documentation electronically and to maintain electronic copies of all their manuals in the marine transfer areas. Savings from this alternative would result from the facilities not having to assemble and mail printed documentation to the COTP. Cost savings would also result from facilities no longer needing to assemble and physically place printed documentation for the marine transfer areas. Alternative 2 would result in greater cost savings related to printing and mailing than alternative 1, as all regulated facilities would submit documents electronically.

However, alternative 2 also has the highest potential cost associated with its implementation. This is because a number of facilities may not currently have the required information technology (IT) infrastructure to permit the use of electronic documentation at their marine transfer areas. For those facilities without the pre-existing IT infrastructure, building the infrastructure could prove expensive compared to the cost savings from reducing the amount of printed manuals and amendments. Factors affecting the building of such IT infrastructure (not all inclusively) include the following:

- The size of the facility;
- How many marine transfer areas there are (each area must have an Operations Manual, and transfer areas in LNG and LHG facilities must also have an Emergency Manual);
- The number and type of products transferred at the facility;
- The types of transfer operations occurring at the facility; and
- Any pre-existing infrastructure that can already facilitate accessing and using electronic documentation (such as “Wi-Fi” or hardwired broadband connections).

Based on these factors, for some facilities the total costs required to access electronic documents could exceed the cost savings from switching to electronic

documentation. In addition, these IT costs could disproportionately affect facilities that are relatively small in terms of revenue. We believe that imposing these additional costs on such small entities would be financially burdensome; therefore, we rejected alternative 2.

Alternative 3—Option to Use Either Printed or Electronic Manuals.

Alternative 3 is the selected alternative for this rulemaking. This alternative explicitly states that facility operators may submit the required Operations Manuals, Emergency Manuals, and amendments either in print or electronic format. In addition, if submitting the required documents in print, only one copy is required. In this alternative, facilities facing higher IT improvement costs could continue to use printed manuals and submissions. Hence, this alternative will lead to the highest net cost savings of the three alternatives.

For these reasons, alternative 3 is the preferred alternative. We provide a discussion of this alternative below.

Affected Population

We identified 121 LNG and LHG facilities that could be potentially impacted by this regulation, based on a search of the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.¹⁴ We also identified 2,497 MTR facilities that could be potentially impacted. A discussion follows describing how the impacted population itself was reached.

LNG and LHG facilities transfer liquefied natural gas and liquefied hazardous gas from vessels to the shore or from the shore to vessels. MTR facilities transfer oil or hazardous material in bulk from vessels to the shore or from the shore to vessels. Operations Manuals provide information relating to LNG, LHG, and MTR facilities, such as physical characteristics (including plans and maps), descriptions of transfer systems

¹⁴ The search of MISLE was conducted on November 18, 2019.

and mooring areas, and diagrams of piping, electrical systems, control rooms, and security systems.¹⁵ Emergency Manuals include information relating to, among other items, emergency shutdown procedures, descriptions of and operating procedures for fire and other emergency equipment, first-aid procedures and stations, and emergency response procedures.¹⁶ Operations Manuals and Emergency Manuals vary in terms of size, anywhere from 0.5-inch, three-ring binders containing 50 pages, to 3-inch, three-ring binders.¹⁷ We have estimated the 3-inch, three-ring binders to be an average of 514 pages in length.¹⁸ The 0.5-inch manuals are the most common size, accounting for the majority of manuals.¹⁹ Therefore, in our cost savings estimate, we assumed that all manuals are 0.5-inch, three-ring binders of 50 pages.

Amendments to both Operations Manuals and Emergency Manuals are intended to keep those manuals up to date.²⁰ Their length depends on the information required to be updated. If the information is significant, these amendments may be as long as the original document submitted to the COTP. If the change is relatively minor, the amendments may only be a few pages. If the amendments are only a few pages, they are submitted to the COTP as individual pages. The COTP then examines those pages and,

¹⁵ A full list of what Operations Manuals need to cover for LNG and LHG facilities is in 33 CFR 127.305 and 127.1305, and for MTR facilities in 33 CFR 154.310.

¹⁶ The full list of items that Emergency Manuals need to cover for LNG facilities can be found in 33 CFR 127.307, and for LHG facilities in 33 CFR 127.1307.

¹⁷ This information was obtained from Coast Guard SMEs in CG-FAC.

¹⁸ The estimate of 514 was based on the maximum size capacity of five 3-inch three-ring binders found at five office supply stores on the Internet. The mean capacity of these five binders was calculated by CG-FAC to come to 514 pages. The five stores included the following: (1) Office Depot (<https://www.officedepot.com/a/products/502062/Wilson-Jones-Binder-3-Rings-36percent/>); (2) Staples (https://www.staples.com/Simply-3-Inch-Round-3-Ring-Binder-Black-26857/product_1319200, accessed November 5, 2019, 460 pages); (3) Walmart (<https://www.walmart.com/ip/Universal-Economy-Round-Ring-View-Binder-3-Capacity-Black-UNV20991/21454956>); (4) Target (<https://www.target.com/p/avery-3-34-one-touch-slant-rings-600-sheet-capacity-heavy-duty-view-binder-white/-/A-14432722>); and (5) Amazon (https://www.amazon.com/Wilson-Jones-Binder-Basic-W362-49W/dp/B0001N9WM8/ref=sr_1_5?keywords=3+ring+3+inch+binder&qid=1573433167&sr=8-5, accessed on November 5, 2019, 550 pages).

¹⁹ This information was obtained from Coast Guard SMEs in CG-FAC.

²⁰ A complete list of items that must be kept current can be found in 33 CFR 127.1305 for LHG facilities Operations Manuals. For LNG facilities, the complete list can be found in 33 CFR 127.305 for Operations Manuals, and in 33 CFR 127.307 for Emergency Manuals. For MTR facilities, 33 CFR 154.300(b) and 154.300(b)(1) state, “the facility operator shall maintain the operations manual so that it is ... current.”

after determining their adequacy, inserts them into the previous edition of the Operations Manual or Emergency Manual.²¹ If the facility sends the amendment in electronic form, the new pages that supersede the old can be inserted into the electronic document that the COTP has (much the same way that pages can be inserted into PDF documents). On the other hand, if the amendment is sent in paper format and the COTP deems it “adequate,” the COTP can insert new pages into the previous edition of the manual to replace the pages that were originally deemed “inadequate.” Coast Guard SMEs estimated that 80 percent of amendments to Operations Manuals and Emergency Manuals consist of 5-page inserts, while 20 percent consist of documents that are as long as full-length Operations Manuals or Emergency Manuals. In our cost savings estimate, we assumed that all amendments would be five pages.

We examined MISLE data between 2009 and 2019 (inclusively) to determine that an annual average of 60 instances²² of Emergency Manuals, Operations Manuals, and amendments are filed by LNG and LHG facilities per year, representing an average of 18 instances for manuals and 42 for amendments.²³ These numbers differ from the numbers shown in appendices A and B in the Collection of Information Under Review by the Office of Management and Budget; OMB Control Number: 1625-0049.²⁴ That information collected, titled “Waterfront Facilities Handling Liquefied Natural Gas (LNG) and Liquefied Hazardous Gas (LHG),” shows 8 instances of manuals and 14

²¹ The original pages that the newly submitted pages replace, assuming the document was in paper format, are disposed of by the COTP.

²² An instance is when a document is filed. It does not necessarily correspond to the number of copies of manuals filed. The reason we use instances instead of the number of copies filed is that instances serve as a better basis to estimate the number of copies of documents required by different scenarios later in this RA. For example, under current regulations two copies of each type of document must be filed in printed format, but under this final rule facility operators will have the option to submit only one copy if they submit in printed format, or zero if they submit in electronic format.

²³ This number is rounded to the nearest whole number, as are all population numbers provided below.

²⁴ This Collection of Information was published in the **Federal Register** at 84 FR 45783 on August 30, 2019.

instances of amendments, for a total of 22 instances of manuals and amendments filed.²⁵ This difference (60 versus 22) is attributable to the fact that the MISLE data for the collection of information and this RA were pulled on different dates. We performed the MISLE pull for this RA on November 18, 2019, while the MISLE pull for the collection of information occurred prior to its date of publication, August 30, 2019. As a result, the total LNG and LHG facility populations, as well as the individual manual and amendment numbers, were different. The collection of information found a combined LNG and LHG population of 108, while we found 121. Hence, this RA projects larger numbers of manuals and amendments than did the collection of information.²⁶

Coast Guard SMEs estimated that 90 percent of LNG/LHG facilities will submit their documentation to the Coast Guard electronically. Thus, of the annual impacted population of 60 LNG/LHG facilities, we estimate the affected annual population of LNG/LHG facilities to be 54 per year submitting their documentation in electronic form, with the remaining 10 percent, or 6 facilities, submitting their documentation in print form.

The MISLE pull for this RA found the average number of instances of Operations Manuals and amendments filed by MTR facilities for the same period (2009-2019) to be 703.²⁷ MTR facilities are only required to file Operations Manuals and amendments, not Emergency Manuals and amendments. Of those 703 instances of manuals and

²⁵ In the collection of information, there were instances of 6 manuals and 12 amendments filed for LHG facilities and instances of 2 manuals and 2 amendments for LNG facilities, for a total of 8 instances of manuals and 14 instances of amendments and a total of 22 documents overall.

²⁶ The reason for the difference between the number of facilities in Collection of Information Under Review by Office of Management and Budget; OMB Control Number: 1625-0049 and that calculated in this rulemaking (22 versus 60) rests with the differing methods the numbers of manuals and amendments were estimated between the collection of information and the rulemaking. In the collection of information, the number of amendments was estimated to grow at an annual rate of 3 percent of the rate of facilities and the number of amendments was estimated to grow at 6 percent the rate of facilities. In the rulemaking, the number of amendments and manuals was based on the actual number that was in the MISLE database. Once the final rule is published, the Coast Guard plans to synchronize the method used to estimate the number of amendments and manuals for the collection of information with that used in the rulemaking (i.e., the 3 percent and 6 percent growth rates will be replaced with data from the MISLE database).

²⁷ We conducted this search of MISLE on November 18, 2019.

amendments, there were an average of 261 instances of manuals and 442 amendments annually. Assuming each submission is for a unique facility (for an annually impacted MTR population of 703), and since Coast Guard SMEs in CG-FAC estimated that 75 percent of MTR facilities will submit their documentation in an electronic format, we estimated a regulated population of 527 MTR facilities electing electronic submission annually, with 25 percent of MTR facilities, or another 176 facilities,²⁸ projected to submit their documentation in print form annually.

The number of annually impacted facilities, by LNG/LHG and MTR facility, as well as the number of different types of manuals and amendments by facility type, is summarized in table 4.

²⁸ This number is rounded up to the closest whole number.

Table 4: Affected Population and Number of Instances of Manuals and Amendments Filed Annually

Facility Type	Total Instances of Operations and Emergency Manuals Filed	Total Instances of Operations and Emergency Manual Amendments Filed	Total Instances of Documents Filed	Total Instances of Operations and Emergency Manuals Filed Electronically	Total Instances of Operations and Emergency Manual Amendments Filed Electronically	Total Instances of Manuals Filed Electronically	Total Instances of Operations and Emergency Manuals Filed in Print Form	Total Instances of Operations and Emergency Manual Amendments Filed in Print Form	Total Instances of Manual Amendments Filed in Print Form
LNG/LHG	18	42	60	16	38	54	2	4	6
MTR	261	442	703	196	332	527	65	111	176
Note: all “total” numbers rounded to the closest whole number									

Cost Savings Components

Tables 5 and 6 summarize the final rule’s cost savings for the private sector and for the Coast Guard. Table 5 provides the private sector’s cost savings for the pertinent maritime facilities of the affected population (LNG/LHG and MTR facilities) as well as by the four different cost savings categories estimated. Table 6 summarizes the Coast Guard’s cost savings.

Table 5: Annual Cost Savings of Final Rule to Private Sector by Population and Cost Savings Element

Population	Cost Savings Element	Annual Cost Savings (\$2020) ¹
LNG/LHG Facilities	Savings from not having to produce printed manuals (and amendments) to mail to the COTP. ²	\$579 ³
	Savings from not having to produce printed manuals (and amendments) for placement at facility marine transfer areas. ⁴	\$242 ⁵
	Savings from not having to mail manuals (and amendments) to the COTP.	\$1,011 ⁶
	Savings from not having to place printed manuals (and amendments) at facility marine transfer areas.	\$1,634 ⁷
Total Annual LNG/LHG Facility Cost Savings		\$3,466⁸
MTR Facilities	Savings from not having to produce printed manuals (and amendments) to mail to the COTP. ⁹	\$11,839 ¹⁰
	Savings from not having to produce printed manuals (and amendments) for placements at facility marine transfer areas. ¹¹	\$2,120 ¹²
	Savings from not having to mail manuals (and amendments) to the COTP.	\$14,312 ¹³
	Savings from not having to place printed manuals (and amendments) at facility marine transfer areas.	\$7,658 ¹⁴
Total Annual MTR Facility Cost Savings		\$35,929¹⁵
Total		\$39,395¹⁶

¹ Rounded to closest whole dollar.

² Includes cost of binder, paper, printing and labor required to assemble.

³ From table 10.

⁴ Includes cost of binder, paper, printing and labor required to assemble. It is also assumed that each facility, as per Coast Guard SME assessment, has an average of two marine transfer areas.

⁵ From table 14.

⁶ From table 12.

⁷ From table 16.

⁸ Total figure may not be exact due to rounding.

⁹ Includes cost of binder, paper, printing, and labor required to assemble.

¹⁰ From table 11.

¹¹ Includes cost of binder, paper, printing and labor required to assemble. It is also assumed that each facility, as per Coast Guard SME assessment, has an average of two marine transfer areas.

¹² From table 15.

¹³ From table 13.

¹⁴ From table 17.

¹⁵ Total figure may not be exact due to rounding.

¹⁶ Total figure may not be exact due to rounding.

Table 6: Annual Cost Savings of Final Rule to Coast Guard

Population	Administrative Cost Savings Element	Annual Cost Savings (\$2020) ¹
Coast Guard	Savings from not having to mail printed manuals (and amendments) back to facilities.	\$8,616 ²
¹ Rounded to closest whole dollar.		
² From table 2.		

Cost Savings Methodology, Calculations, and Estimates

We separated the analysis of cost savings for this rulemaking into three sections. The first examines the cost savings for the private sector. The second discusses the cost savings for the Coast Guard. The third provides an aggregated summary of the cost savings as well as the estimates on a discounted basis.

Private Sector Cost Savings

We separated cost savings for the private sector into two categories. The first involves the cost savings associated with facility operators having the option to submit Operations Manuals and Emergency Manuals (and amendments) in electronic format. The second involves the option to place electronic versions of their Operations Manuals and Emergency Manuals (and amendments) at their marine transfer areas.

Cost savings from the Reduced Numbers of Operations Manuals and Emergency Manuals (and Amendments) Sent to the Coast Guard

LNG and LHG facility operators are currently required to submit two copies of their Operations Manuals and Emergency Manuals and amendments to the COTP.²⁹ Generally, they are not sent at the same time.³⁰ MTR facility operators are currently required to submit two copies of their Operations Manuals and amendments.³¹ Although current regulations do not explicitly state that the copies submitted must be printed, the wording and context suggest the use of printed documents, and current industry practice

²⁹ 33 CFR 127.019(a) and (b).

³⁰ As these documents are usually written by different personnel and do not need to be received simultaneously, they are generally not sent together.

³¹ 33 CFR 154.300(a).

is to submit printed documents.³²

The cost savings components that make up the 0.5-inch binders consist of the actual cost of the empty 0.5-inch, 3-ring binder, the cost of 50 pages of paper, the cost of printing those 50 pages, and the labor required to put the manual together. The cost of all these elements, with the notable exception of labor, is the same whether the manual is for an LNG or LHG facility or an MTR facility. In the NPRM, we estimated that the cost of the empty 0.5-inch binders in 2019 dollars is \$3.66, based on the mean for 0.5-inch binders from 5 different websites selling this item.³³ Converting to 2020 dollars, using the seasonally adjusted Consumer Price Index for All Urban Consumers, the figure is \$3.71.³⁴

In the NPRM, we estimated the cost of 50 sheets of copier paper to be 62.5 cents, based on the mean for boxes of 500 pages from 5 different supply stores.³⁵ Converting to

³² The current regulation regarding the two-copy requirement was issued in 1988 for LNG and LHG facilities (53 FR 3370, Feb. 5, 1988), and in 1996 for MTR facilities (61 FR 41452, Aug. 8, 1996). At that time, it was not possible to electronically send a document as large and complicated as a complete Operations Manual or Emergency Manual as an attachment via email or other electronic means

³³ The five different websites were: (1) Office Depot (<https://www.officedepot.com/a/products/765530/Aurora-EarthView-Round-Ring-Organization-Binder/>) (\$5.99), (2) Staples (https://www.staples.com/Simply-5-inch-Light-Use-Round-3-Ring-Binder-Red-26852/product_1337664) (\$3.29), (3) Walmart (<https://www.walmart.com/ip/Pen-Gear-0-5-inch-Durable-Binder-Clearview-Cover-White/945565181>) (\$2.47), (4) Target (<https://www.target.com/p/avery-120-sheet-0-5-34-durable-view-ring-binder-black/-/A-16978071>) (\$2.59), and (5) Amazon (https://www.amazon.com/Avery-Economy-Binder-0-5-Inch-Round/dp/B0006SWEEG/ref=sr_1_6?qid=1583117388&refinements=p_n_feature_keywords_two_browse-bin%3A7103303011&s=office-products&sr=1-6) (\$4.60). The mean of all these figures is \$3.66. All websites cited were accessed on Nov. 10, 2019.

³⁴ The specific series used was CUSR0000SA0 (seasonally adjusted), downloaded from the BLS's Consumer Price Index seasonally adjusted tables (<https://www.bls.gov/cpi/tables/seasonal-adjustment/home.htm>, accessed July 6, 2021), specifically from the link associated with "Revised seasonally adjusted indexes and factors, 2016-2029." From the downloaded Excel sheet, the mean index for 2020 was calculated at 258.8441 and for 2019 at 255.6525. Using these two figures as the basis to estimate a price multiplier, we derive $(258.8441/255.6525 = 1.013)$. Multiplying the 2019 dollar terms \$3.66 by 1.013, the figure in 2020 dollar terms is derived $(\$2.66 \times 1.013 = \$3.708, \text{rounded to } \$3.71)$.

³⁵ The websites were: (1) Office Depot (<https://www.officedepot.com/a/products/841195/Office-Depot-Copy-And-Print-Paper/>) (\$8.29), (2) Staples (https://www.staples.com/500+ream+paper/directory_500%20ream%20paper?sby=1) (\$5.79), (3) Walmart (<https://www.walmart.com/ip/Pen-Gear-Copy-Paper-8-5x11-92-Bright-20-lb-1-ream-500-Sheets/487634010>) (\$3.97), (4) Amazon (https://www.amazon.com/Hammermill-Recycled-Printer-Letter-086790R/dp/B009ZMP31K/ref=sr_1_6?keywords=500+ream+paper&qid=1573437715&sr=8-6) (\$9.20), and (5) Target (<https://www.target.com/p/avery-120-sheet-0-5-34-durable-view-ring-binder-black/-/A-16978071>) (\$3.99). The mean of these five figures is \$6.25. Dividing \$6.25 by 500 pages results in a figure of .0125 cents per page. That amount multiplied by 50 pages gives us a cost of 62.5 cents.

2020 dollars, we obtain \$0.63.³⁶ In the NPRM, we found the cost to print 50 pages in black and white to be \$2.23.³⁷ Converting to 2020 terms, the figure is \$2.26.³⁸ Combining the 2020 dollar terms, the sum is \$6.60.³⁹

As the labor costs between LNG/LHG and MTR facilities are different, the labor component of assembling these manuals also differ. According to Coast Guard SMEs, as well as the collection of information, OMB Control Number 1625-0049, “Waterfront Facilities Handling Liquefied Natural Gas and Liquefied Hazardous Gas,” clerical workers assemble manuals at LNG and LHG facilities. The BLS website has no specific labor category for clerical workers under North American Industry Classification System (NAICS) industry 483000 (Water Transportation). The closest we were able to find was “Office Clerks, General” (Occupational Code 43-9061).⁴⁰ The BLS gave the mean hourly wage for this category of labor as \$21.32.⁴¹ As wages account for only a portion of total employee costs (employee benefits account for the other part), we adjusted wages to take benefits into account. Using the BLS U.S. Department of Labor News Release for March 18, 2021 (USDL-21-0437), benefits for employees in the “Production, Transportation and Material Moving” sector of the economy, private sector, accounted

³⁶ $\$0.625 \times 1.013 = \0.633 , rounded to \$0.63.

³⁷ This cost is found in “Ink-onomics: Can you Save Money by Spending More on Your Printer,” PCWorld, May 2, 2012

(https://www.pcworld.com/article/254899/ink_onomics_can_you_save_money_by_spending_more_on_your_printer.html) was found to be 3.9 cents per page for printers costing over \$200. This May 2012 dollar figure was converted to \$2019 using the Bureau of Economic Analysis, National Income and Product Accounts, Table 1.1.4 Price Indexes for Gross Domestic Product, Annual Series, last revised on April 29, 2020 (<https://www.bea.gov/iTable/iTableHtml.cfm?reqid=19&step=3&isuri=1&1910=x&0=-99&1921=survey&1903=4&1904=2009&1905=2018&1906=a&1911=0>) as a gross domestic product. This calculation can be accessed by the “modify” button on the right, choosing “annual” series, and then “refresh table.” The GDP deflator for 2012 was 100, and for 2019, 112.348. Hence, 3.9 cents was increased by 12.348 percent to yield a figure of 4.45 cents (rounded to closest whole cent). Multiplying this figure by 50 (for the number of pages) yields, in turn, \$2.23 for 50 pages (rounded to closest whole cent).

³⁸ $\$2.23 \times 1.013 = \2.258 , rounded to \$2.26.

³⁹ $\$3.71 + \$0.63 + \$2.26 = \6.60 .

⁴⁰ “May 2020 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 483000-Water Transportation,” (https://www.bls.gov/oes/2020/May/naics3_483000.htm), downloaded April 16, 2021.

⁴¹ Ibid.

for \$10.92 per hour, or 51 percent of wages.⁴² Thus, we estimated the fully burdened or loaded wage rate, at \$32.19 per hour for LNG/LHG facilities.⁴³ In the NPRM, we estimated the fully burdened wage rate at \$30.28, a difference of \$1.91.

According to Coast Guard SMEs, as well as the latest collection of information, OMB Control Number 1625-0093, “Facilities Transferring Oil and Hazardous Material in Bulk—Letter of Intent and Operations Manual,” MTR facilities use general and operations managers to assemble Operations Manuals. The BLS website, under NAICS industry 483000 (Water Transportation), reports an hourly mean wage of \$70.65 for general and operations managers (Occupational Code 11-1021).⁴⁴ As stated previously, according to the BLS, employees in the “Production, Transportation and Material Moving” sector of the economy, private sector, have benefits corresponding to 51 percent of wages in that industry.⁴⁵ Hence, the loaded wage rate for general and operations managers is \$106.82 per hour.⁴⁶ In the NPRM, we estimated the fully burdened wage rate at \$100.03, a difference of \$6.79.

With respect to the assembly of a 0.5-inch, 50-page manual, we performed the task ourselves and found that it took an average of 5.12 minutes (or 0.09 hours).⁴⁷ As a result, the labor cost of assembling a manual for an LNG or LHG facility came to \$2.90.⁴⁸ For an MTR facility, the cost came to \$9.61.⁴⁹ Thus, for an LNG or LHG

⁴² Bureau of Labor Statistics Employer Costs for Employee Compensation news release (USDL-21-0437), March 18, 2021 (<https://www.bls.gov/news.release/pdf/ecec.pdf>), table 5, page 9, referenced April 18, 2021. According to this document, for the “production, transportation and material moving” industry, benefits were \$10.92 per hour while wages were \$21.36 (for a ratio of benefits to wages of 51 percent).

⁴³ \$21.32 plus (\$21.32 multiplied by 51%) equals \$32.19.

⁴⁴ “May 2020 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 483000-Water Transportation,” (https://www.bls.gov/oes/2020/May/naics3_483000.htm), downloaded April 16, 2021.

⁴⁵ Bureau of Labor Statistics Employer Costs for Employee Compensation news release (USDL-21-0437), March 18, 2021 (<https://www.bls.gov/news.release/pdf/ecec.pdf>), table 5, page 9, referenced April 18, 2021. According to this document, for the “production, transportation and material moving” industry, benefits were \$10.92 per hour while wages were \$21.36 (for a ratio of benefits to wages of 51 percent).

⁴⁶ \$21.32 plus (\$21.32 multiplied by 51%) equals \$32.19.

⁴⁷ \$70.65 plus (\$70.65 multiplied by 51%) equals \$106.82.

⁴⁸ This time estimate is based on the average amount of time the Coast Guard consumed to print 50 pages and assemble them in a 0.5-inch 3-ring binder.

⁴⁹ 0.09 hours multiplied by \$32.19 equals \$2.90.

0.09 hours multiplied by \$106.82 equals \$9.61.

facility, we estimated the total cost of assembling a 0.5-inch binder for an Operations Manual or Emergency Manual to be \$9.50.⁵⁰ These are the costs associated with producing one copy of an Operations Manual or an Emergency Manual (we estimated that they cost the same to assemble). For an MTR facility Operations Manual, we estimated the total cost to assemble to be \$16.21.⁵¹ All binder assembly costs are shown in table 7. In the NPRM, in contrast, we estimated the cost to assemble an LNG/LHG binder at \$9.25 and the cost to assemble the MTR facility binder at \$15.52.⁵²

Table 7: Cost to Assemble 0.5-Inch Binders for LNG/LHG and MTR Facilities

0.5-Inch Binder Assembly Costs					
	Binder	Print	Printing	Labor	Total
LNG/LHG	\$3.71	\$0.63	\$2.26	\$2.90	\$9.50
MTR	\$3.71	\$0.63	\$2.26	\$9.61	\$16.21

As amendments to both Operations Manuals and Emergency Manuals are usually 5 pages, in the NPRM we estimated the cost of paper to total \$0.06⁵³ and the cost of printing to total \$0.22.⁵⁴ Due to rounding, those figures do not change when expressed in 2020 dollar terms.⁵⁵ The estimated total cost of amendments, other than labor and shipping, is \$0.28 per amendment. These costs are the same regardless of whether the amendment is for an LNG or LHG facility or an MTR facility.

Due to the difference in labor costs between LNG/LHG facilities and MTR facilities, the labor costs for assembling amendments differs for facilities of different types. As stated previously, we found the labor cost to be \$70.65 per hour for LNG/LHG facilities and \$106.82 for MTR facilities. We found that printing 5 pages and assembling

⁵⁰ \$3.71 (cost of binder) + \$0.63 (cost of blank paper) + \$2.26 (printing cost) + \$2.90 (labor cost of assembly) = \$9.50.

⁵¹ \$3.71 (cost of binder) + \$0.63 (cost of blank paper) + \$2.26 (printing cost) + \$9.61 (labor cost of assembly) = \$16.21.

⁵² These numbers can be found in table 5 of the NPRM.

⁵³ The mean cost of a 500-page ream of paper based on 5 prices at different retailers was found to be \$6.25. Dividing \$6.25 by 500 yields a per-sheet price of 1.25 cents per page. Multiplying 1.25 by 5 yields 6.25 cents, which is rounded down to 6 cents.

⁵⁴ From table 6 in the NPRM.

⁵⁵ $\$0.06 \times 1.013 = \0.06078 , rounded to \$0.06. $\$0.22 \times 1.013 = \0.2228 , rounded to \$0.22.

them for mailing took 1.25 minutes (0.02 hours). Hence, we estimated the labor costs for LNG/LHG facilities at \$1.41 and for MTR facilities at \$2.14.^{56, 57} The total cost of creating a 5-page amendment for an LNG/LHG facility is \$1.69 per document and for MTR facility is \$2.42.^{58, 59} These costs are detailed in table 8. In the NPRM, we estimated the associated costs at \$1.60 and \$2.28.⁶⁰

Table 8: Cost to Assemble 5-Page Amendments for LNG/LHG and MTR Facilities

5-Page Amendment Assembly Costs				
Facility Type	Paper	Printing	Labor	Total
LNG/LHG	\$0.06	\$0.22	\$1.41	\$1.69
MTR	\$0.06	\$0.22	\$2.14	\$2.42

In addition to the cost of assembling each manual and amendment, we also considered shipping and handling costs. We calculated shipping and handling costs for both scenarios because, currently, there are situations when only one copy of a document needs to be mailed and other situations when two are needed.⁶¹

Because it is a legal requirement for these facilities to send their documents to the COTP, we assumed that the manuals and amendments are sent with a mail service that permits tracking. We also assumed that facilities use a cost-effective ground shipping method.⁶² As of June 7, 2021, there were 41 COTP zones.⁶³ All of these sites are clustered around shipping points in order to ensure COTPs can perform their functions. Hence, no facility should be very far, geographically, from a shipping point. We

⁵⁶ \$70.65 multiplied by 0.02 equals \$1.41.

⁵⁷ \$106.82 multiplied by 0.02 equals \$2.14.

⁵⁸ \$0.06 (cost of paper) plus \$0.22 (cost to print pages) plus \$1.41 (labor cost to assemble) equals \$1.69.

⁵⁹ \$0.06 (cost of paper) plus \$0.22 (cost to print pages) plus \$2.00 (labor cost to assemble) equals \$2.42.

⁶⁰ From table 6 in the NPRM.

⁶¹ For example, currently, when documents are initially submitted to the Coast Guard, two copies of each are currently required to be sent, but when documents are required to be re-submitted to the Coast Guard to correct inadequacies, only one copy of a document needs to be sent.

⁶² The exact amount of time depends on the relevant applicable section of the regulations: 33 CFR 127.019(b) and 145.325(c) give facilities a time period of 30 days to file, 33 CFR 145.320(a)(1) and 145.320(b)(1) give facilities 45 days to file, and 33 CFR 145.325(b) gives facilities 60 days to file.

⁶³ ArcGIS has a website listing the full set of 41 zones (<https://hub.arcgis.com/datasets/geoplatform::us-coast-guard-uscg-captain-of-the-port-zones/explore?showTable=true>, downloaded July 6, 2021).

assumed that the manuals and amendments are sent via a shipping service such as UPS or FedEx. We assumed shipping distances to correspond to zone 2 distances in the UPS and FedEx pricing guides, as this is the closest shipping distance price point.⁶⁴ Current regulations require that two copies be submitted to the COTP. Therefore, we calculated the shipping cost for two 0.5-inch binders.⁶⁵ The two 0.5-inch binders with 50 pages each have a total estimated weight of 2.8 pounds, for a total of 5.6 pounds for a package of two. Based on a 6-pound package, the average cost for these shipping services was \$10.19.⁶⁶ In the NPRM, we estimated the cost at \$10.11.⁶⁷

Currently, facilities send back two copies of the revised version of the Operations Manual or Emergency Manual when the COTP determines that the manual is inadequate. Under the final rule, only one copy of the document must be sent back to the COTP, in either print or electronic format.

⁶⁴ The UPS pricing guide used was “2020 UPS Rate and Service Guide, Daily Rates, updated October 5, 2020” (https://www.ups.com/assets/resources/media/daily_rates.pdf, downloaded July 8, 2021); the FedEx price guide was “Federal Express Service Guide, January 6, 2020, updated September 28, 2020” (https://www.fedex.com/content/dam/fedex/us-united-states/services/Service_Guide_2020.pdf, downloaded July 7, 2021).

⁶⁵ We estimated the weight of an empty 0.5-inch binder at 13 ounces, based on the mean weight of the same 5 binders used to determine the mean cost of 0.5-inch binders. For the webpages for those binders, where weight data was available, the mean was estimated. The webpages were as follows: (1) <https://www.officedepot.com/a/products/765530/Aurora-EarthView-Round-Ring-Organization-Binder/>; (2) https://www.staples.com/Simply-5-inch-Light-Use-Round-3-Ring-Binder-Red-26852/product_1337664; (3) <https://www.walmart.com/ip/Pen-Gear-0-5-inch-Durable-Binder-Clearview-Cover-White/945565181>; (4) <https://www.target.com/p/avery-120-sheet-0-5-34-durable-view-ring-binder-black/-/A-16978071>; and (5) https://www.amazon.com/Avery-Economy-Binder-0-5-Inch-Round/dp/B0006SWEEG/ref=sr_1_6?qid=1583117388&refinements=p_n_feature_keywords_two_browse-bin%3A7103303011&s=office-products&sr=1-6. We estimated the weight of the 50 pages at 32 ounces, based on the five webpages that we used to determine the average price of paper. The weight of a 500-page ream of paper, on each of these websites, was 320 ounces ($50/500 \times 320 = 32$ ounces). Those five websites were: (1) <https://www.officedepot.com/a/products/841195/Office-Depot-Copy-And-Print-Paper/>; (2) https://www.staples.com/500+ream+paper/directory_500%20ream%20paper?sby=1; (3) <https://www.walmart.com/ip/Pen-Gear-Copy-Paper-8-5x11-92-Bright-20-lb-1-ream-500-Sheets/487634010>; (4) <https://www.target.com/p/500ct-letter-printer-paper-white-up-up-153/-/A-75001545>; (5) https://www.amazon.com/Hammermill-Recycled-Printer-Letter-086790R/dp/B009ZMP31K/ref=sr_1_6?keywords=500+ream+paper&qid=1573437715&sr=8-6. Therefore, the weight of a single 0.5-inch manual is as follows: 32 ounces + 13 = 45 ounces = 2.8 pounds.

⁶⁶ “2020 UPS Rate and Service Guide, Daily Rates, updated October, 5 2020,” p. 68 (https://www.ups.com/assets/resources/media/daily_rates.pdf, downloaded July 8, 2021), shows UPS charged \$10.19; “Federal Express Service Guide, January 6, 2020, updated September 28, 2020,” p. 107 (https://www.fedex.com/content/dam/fedex/us-united-states/services/Service_Guide_2021.pdf) shows that FedEx charged \$10.19. Hence, the average was \$10.19.

⁶⁷ See table 7 of the NPRM.

We calculated the shipping costs for mailing a single 0.5-inch Operations Manual or Emergency Manual. We estimated that a single 0.5-inch manual weighs 2.8 pounds. For mailing purposes, UPS and FedEx charge the cost associated with a 3-pound item. The average cost of these mailing services is \$9.25.⁶⁸ In the NPRM, we estimated the cost at \$9.56.⁶⁹

With respect to shipping costs associated with amendments, we made many of the same assumptions as for shipping and handling 0.5-inch manuals. For example, we assumed that UPS or FedEx ground shipping is the selected service. As either one or two 5-page amendments weigh less than 1 pound, the shipping cost is the same whether one or two are mailed together. The cost is \$8.23 for both UPS and FedEx (for a mean of \$8.23).⁷⁰ In the NPRM, we estimated the associated cost for shipping one or two amendments at \$8.88.⁷¹

Additionally, facilities must handle these manuals as part of the shipping process. As stated previously, labor costs differ between LNG/LHG facilities and MTR facilities. For LNG/LHG facilities, the loaded hourly labor rate is \$70.65, and for MTR facilities it is \$106.82. We estimated the time required to assemble manuals to be 5 minutes (0.08 hours),⁷² rounded to the closest whole minute, for assembling either one manual or two.⁷³ From this, we estimated labor time for assembling manuals to mail to the COTP to cost

⁶⁸ “2020 UPS Rate and Service Guide, Daily Rates, updated October, 5 2020,” p. 68 (https://www.ups.com/assets/resources/media/daily_rates.pdf, downloaded July 8, 2021), shows UPS charged \$9.25; “Federal Express Service Guide, January 6, 2020, updated September 28, 2020,” p. 107 (https://www.fedex.com/content/dam/fedex/us-united-states/services/Service_Guide_2021.pdf) shows that FedEx charged \$9.25. Hence, the average was \$9.25.

⁶⁹ See table 7 in the NPRM.

⁷⁰ “2020 UPS Rate and Service Guide, Daily Rates, updated October, 5 2020,” p. 68 (https://www.ups.com/assets/resources/media/daily_rates.pdf, downloaded July 8, 2021), shows UPS charged \$8.23; “Federal Express Service Guide, January 6, 2020, updated September 28, 2020,” p. 107 (https://www.fedex.com/content/dam/fedex/us-united-states/services/Service_Guide_2021.pdf) shows that FedEx charged \$8.23. Hence, the average was \$8.23.

⁷¹ See table 7 in the NPRM.

⁷² This includes time to obtain a box, package up the manual or manuals, complete the required mailing paperwork, and place it into the office “out” mailbox.

⁷³ Based on time samples we ran, we estimated that 4.8 minutes were needed to remove the paper from the copier, put it in an envelope, fill out the documentation and place it in the office “out” mailbox for one manual. To package and complete 2 manuals, we estimated that 5.1 minutes will be required. Rounding both to 5 minutes, this totals an estimated 0.08 hours.

\$5.65⁷⁴ for LNG/LHG facilities and \$8.55 for MTR facilities.⁷⁵ In the NPRM, the associated numbers were \$5.27 for LNG/LHG facilities and \$8.00 for MTR facilities.⁷⁶

Labor handling costs for amendments are also slightly different due to the labor cost differences between LNG/LHG and MTR facilities. We estimated that handling a package that contains either one or two 5-page amendments, rounded to the nearest whole minute, takes 4 minutes (0.07 hours), regardless of facility type. As a result, we estimated labor handling costs for packages that hold one or two amendments to be \$4.95⁷⁷ for LNG/LHG facilities and \$7.48 for MTR facilities.⁷⁸ In the NPRM, the associated figures were \$4.61 for LGN/LHG facilities and \$7.00 for MTR facilities.⁷⁹

The shipping and handling costs for all types of documents by both LNG/LHG facilities and MTR facilities are summarized in table 9. Table 9 includes not only these costs for the final rule but also the NPRM. The NPRM numbers are in parentheses immediately beneath the final rule figures.

Table 9: Shipping and Handling Costs by Facility and Document Type (Final Rule and NPRM)

LNG/LHG Facility Documents			
Document Type	Shipping Cost	Handling (Labor Costs)	Total
Operations Manuals and Emergency Manuals (one 0.5-inch binder) for LNG/LHG facilities.	\$9.25 (NPRM: \$9.56)	\$5.65 (NPRM: \$5.27)	\$14.90 (NPRM: \$14.83)
Operations Manuals and Emergency Manuals (two 0.5-inch binders) for LNG/LHG facilities.	\$10.19 (NPRM: \$10.11)	\$5.65 (NPRM: \$5.27)	\$15.84 (NPRM: \$15.38)
Amendments (one or two 5-page amendments) for LNG/LHG facilities.	\$8.23 (NPRM: \$8.88)	\$4.95 (NPRM: \$4.61)	\$13.18 (NPRM: \$13.49)
MTR Facility Documents			
Document Type	Shipping Cost	Handling (Labor Costs)	Total
Operations Manuals (one 0.5-inch binder) for MTR facilities.	\$9.25	\$8.55	\$17.80

⁷⁴ \$70.65 multiplied by 0.08 equals \$5.65.

⁷⁵ \$106.82 multiplied by 0.08 equals \$8.55.

⁷⁶ See table 8 of the NPRM.

⁷⁷ 0.07 multiplied by \$70.65 equals \$4.95.

⁷⁸ 0.07 multiplied by \$106.82 equals \$7.48.

⁷⁹ See table 8 of NPRM.

	(NPRM: \$9.56)	(NPRM: \$8.00)	(NPRM: \$17.56)
Operations Manuals (two 0.5-inch binders) for MTR facilities.	\$10.19 (NPRM: \$10.11)	\$8.55 (NPRM: \$8.00)	\$18.74 (NPRM: \$18.11)
Amendments (one or two 5-page amendments) for MTR facilities.	\$8.23 (NPRM: \$8.88)	\$7.48 (NPRM: \$7.00)	\$15.71 (NPRM: \$15.88)

The final component of the cost savings estimate to industry is the quantity of manuals and amendments that facilities are sending to the COTP. LNG and LHG facilities are currently required to submit two copies of their Operations Manuals and Emergency Manuals and amendments to the COTP, and MTR facilities are currently required to submit two copies of their Operations Manuals (and amendments).⁸⁰ The final rule permits facilities to submit their documents in either print or electronic format. Facility operators submitting electronically will save the cost of assembling and shipping two copies of their documents.

The final rule also permits those facility operators submitting printed documents to submit one copy instead of two. Hence, those facilities will save the costs associated with producing and mailing one copy of their manuals. Coast Guard SMEs estimated that 90 percent of LNG/LHG facilities will submit their manuals and amendments electronically, and 75 percent of MTR facilities will submit their manuals and amendments electronically. The reason for this difference is that LNG/LHG facilities are much more likely to be owned by large multi-national conglomerates than MTR facilities. LNG/LHG facilities are, therefore, more likely to fully utilize modern IT systems and be able to submit their documents electronically.

During the review process of the initially submitted documents, the COTP may reject submitted manuals and amendments due to inadequacies in meeting the regulatory requirements put forth in 33 CFR part 127 for LNG and LHG facilities, or part 154 for

⁸⁰ Currently, two copies must be sent in initially, but if copies of manuals or amendments need to be sent in again because they were found inadequate by the Coast Guard, only one copy needs to be sent.

MTR facilities. Coast Guard SMEs estimated that 30 percent of the total number of all manuals (not amendments) sent by facilities are inadequate and must be returned for corrections. For amendments, Coast Guard SMEs estimated that the rejection rate is 15 percent. The reason for the lower rejection rate is that amendments are based on previously approved documents and are shorter, having a lower chance of containing inadequacies.

Under current regulations, facilities send back to the COTP two copies, in printed format, to address an inadequacy. Under this rule, facilities will instead, at their discretion, respond to an inadequacy in either electronic or printed format. If they respond in printed format, they will send only one copy instead of two and will save the costs associated with producing and mailing one copy of the manual or amendment. If they submit in electronic format, they will save the costs associated with producing and mailing two copies of the document.

In summary, the cost savings for the private sector stem from the following:

- LNG/LHG facilities initially printing and mailing fewer printed Operations Manuals and Emergency Manuals (0.5-inch binders) and amendments (5 pages) to the Coast Guard.
- LNG/LHG facilities printing and mailing fewer printed Operations Manuals and Emergency Manuals (0.5-inch binders) and amendments (5 pages) that have to be resubmitted to the COTP.
- LNG/LHG facilities storing fewer printed Operations Manuals and Emergency Manuals (0.5-inch binders) and amendments (5 pages) at marine transfer areas.
- MTR facilities initially printing and mailing fewer printed Operations Manuals (0.5-inch binders) and amendments (5 pages) to the COTP.
- MTR facilities printing and mailing fewer printed Operations Manuals (0.5-inch binders) and amendments that have to be resubmitted to the COTP.

- MTR facilities storing fewer printed Operations Manuals (0.5-inch binders) and amendments (5 pages) at marine transfer areas.

We calculated the cost savings by taking the annual population of facilities, multiplied by the number of manuals or amendments per facility, multiplied by the probability of the facility of transitioning to electronic submissions, multiplied by production and shipping costs. The cost savings from the changes are the same each year. Tables 10 through 17 show the annual cost savings to facilities by activity.

We predicted that 90 percent of LNG/LHG facilities will convert their Operations Manuals and Emergency Manuals to an electronic format. The remaining 10 percent of LNG/LHG facilities will still experience some cost savings since they will only be required to assemble one copy of their manuals to initially mail to the COTP (instead of the current two). Because these 10 percent of LNG/LHG facilities will continue to send the same number of “corrected” printed manuals back to the COTP, they will not experience cost savings with respect to these. The cost elements to produce manuals and amendments were previously shown in tables 7 and 8.

Table 10 shows the administrative cost savings to LNG/LHG facilities from producing fewer Operations Manuals and Emergency Manuals that are mailed to the Coast Guard. A brief summary of the components of that table follows.

The term “Instances of Documents Forecast to be submitted” is an annual average of the instances of manuals and amendments that have been submitted over the past 10 years, based on MISLE data. A more thorough discussion of these numbers can be found in the “Affected Population” section of this preamble.

The “Expected Rate of Electronic Documents Submitted” is the percentage of documents expected to be submitted in electronic format instead of print. As stated previously, we based the terms on Coast Guard SME input. The 27 percent figure reflects the SME estimate that 90 percent of manuals will be submitted in electronic

format and that 30 percent of all manuals submitted to the COTP are found inadequate.⁸¹ For this 27 percent of documents, there will be a cost savings associated with the cost of producing and mailing two printed manuals. Similarly, the 3 percent figure represents the estimated 10 percent of manuals that will be submitted to the COTP in printed format, 30 percent of which will be found inadequate.⁸² In this case, one printed document will be mailed as opposed to the two under the current regulation, so these facilities will save the cost of producing and mailing one printed copy.

Likewise, for amendments submitted electronically, the 14 percent figure reflects the 90 percent estimate combined with the SME estimate that 15 percent of all amendments submitted are found to not be adequate.⁸³ In this case, the cost savings would arise from no longer having to produce and mail two printed copies. For amendments submitted in printed format, the analogous percentage is 2 percent.⁸⁴ In this case, the associated cost savings would come from only needing to produce and mail one printed copy instead of the previous two.

The “Reduction in Printed Documents Needed” column reflects the documents no longer needed as a result of the actions in the first column (compared to current regulations). For example, in the first row, when LNG/LHG facilities submit their manuals in electronic form, as opposed to print, they will not need to submit two copies of electronic manuals. As a result, these facilities will experience a cost savings that is equal to the cost of assembling the documents. In the second row, the facilities that continue to submit printed manuals (instead of electronic) will experience a cost savings from having to submit one document instead of two.⁸⁵

⁸¹ 90 percent multiplied by 30 percent equals 27 percent.

⁸² 10 percent multiplied by 30 percent is 3 percent.

⁸³ 90 percent multiplied by 15 percent equals 13.5 percent, rounded up to 14 percent.

⁸⁴ 10 percent multiplied by 15 percent equals 1.5 percent, rounded to 2 percent.

⁸⁵ The current regulations require the submission of two documents, while the final rule requires those facilities submitting printed documentation to submit only one copy of each document instead of two.

Table 10: Annual LNG/LHG Facility Production Cost Savings¹

LNG/LHG Production Cost Savings From:	Instances of Documents Forecast to be Submitted	Expected Rate of Electronic Documents Submitted	Reduction in Printed Documents Needed	Production Costs (each) ²	Total Production Cost Savings
Manuals Submitted Electronically	18	90%	2	\$9.50	\$307.80
Manuals Submitted in Printed Form		10%	1	\$9.50	\$17.10
Amendments Submitted Electronically	42	90%	2	\$1.69	\$127.76
Amendments Submitted in Printed Form		10%	1	\$1.69	\$7.10
Inadequate Manuals Submitted Electronically	18	27%	2	\$9.50	\$92.34
Inadequate Manuals Submitted in Printed Form		3%	1	\$9.50	\$5.13
Inadequate Amendments Submitted Electronically	42	14%	2	\$1.69	\$19.87
Inadequate Amendments Submitted in Printed Form		2%	1	\$1.69	\$1.42
TOTAL					\$578.52
¹ All figures rounded to the nearest whole cent.					
² All production cost figures cited in this column can be found in tables 7 and 8.					

Table 11 presents the administrative cost savings to MTR facilities from producing fewer Operations Manuals. Of MTR facilities, Coast Guard SMEs estimated that 75 percent will convert their Operations Manuals to an electronic format. The remaining 25 percent of MTR facilities will still experience some administrative cost savings, since they will only be required to produce and mail in one copy of their manuals (instead of the current two).

With respect to inadequate documents that have been returned to facilities by the COTP, facilities' cost savings will depend on whether they send these back to the COTP in electronic or printed format. If they send documents back in electronic format, facilities will experience the cost savings associated with not having to produce and mail

two copies. If they send documents back in printed format, they will only experience the cost savings associated with not having to produce and mail one copy, as they will be sending one printed document as opposed to the two required in the current regulations.

Table 11 shows that the instances of Operations Manuals forecast to be required annually is 261 and the instances of amendments is 442, based on MISLE data. A more thorough discussion of these numbers can be found in the “Affected Population” section of this final rule.

The “Expected Rate of Electronic Documents Submitted” column shows the percentage of documents expected to be submitted in electronic format as opposed to print. For the manuals, this was 75 percent, and for the amendments, 25 percent. As stated previously, these numbers were based on Coast Guard SME input.

We derived the 23 percent figure from SME estimates that 30 percent of the manuals submitted electronically will require correction.⁸⁶ We derived the 8 percent figure in an analogous manner.⁸⁷ Similarly, we derived the 11 percent and 4 percent figures from the SME estimate that 15 percent of all amendments submitted are found to be inadequate.^{88, 89}

The “Reduction in Paper Documents Needed” column reflects, analogously to table 10, the decrease in each type of document required in paper form. For inadequate documents that are submitted electronically to the COTP, the cost of two paper documents is saved as they will no longer need to send a printed copy. Those submitting printed documents in response to inadequacies pointed out by the COTP will experience a cost savings associated with one printed document, as they will only be sending in one copy as opposed to the currently required two.

⁸⁶ 30 percent multiplied by 75 percent equals 23 percent (rounded to closest whole percentage).

⁸⁷ 30 percent multiplied by 25 percent equals 7.5 percent, rounded to 8 percent.

⁸⁸ 15 percent multiplied by 75 percent equals 11 percent (rounded to closest whole percentage).

⁸⁹ 15 percent multiplied by 25 percent equals 3.75 percent, rounded to 4 percent.

Table 11: Annual MTR Facility Production Cost Savings

MTR Facility Production Cost Savings From:	Instances of Documents Forecast to be Submitted	Expected Rate of Electronic Documents Submitted	Reduction in Printed Documents Needed	Production Costs (each) ¹	Total Production Cost Savings
Manuals Submitted Electronically	261	75%	2	\$16.21	\$6,346.22
Manuals Submitted in Printed Form		25%	1	\$16.21	\$1,057.70
Amendments Submitted Electronically	442	75%	2	\$2.42	\$1,604.46
Amendments Submitted in Printed Form		25%	1	\$2.42	\$267.41
Inadequate Manuals Submitted Electronically	261	23%	2	\$16.21	\$1,946.17
Inadequate Manuals Submitted in Printed Form		8%	1	\$16.21	\$338.46
Inadequate Amendments Submitted Electronically	442	11%	2	\$2.42	\$235.32
Inadequate Amendments Submitted in Printed Form		4%	1	\$2.42	\$42.79
TOTAL					\$11,838.53
¹ All production cost figures in this column can be found in tables 5 and 6.					

In addition to the cost savings associated with the need to manufacture and assemble less documentation, there will also be a cost savings associated with having to mail fewer documents to the COTP. Tables 12 and 13 capture these savings by facility and document type.

The “Instances of Documents Forecast to be Submitted” column represents the total number of each type of document expected to be submitted to the COTP. The “Expected Rate of Electronic Documents” column shows the percentage of each type of document that is expected to be submitted in electronic format. The “Shipping Costs” column shows the costs associated with mailing and handling each type of document.

Table 12: Annual LNG/LHG Facility Shipping and Handling Cost Savings

LNG/LHG Facility Shipping Cost Savings From:	Instances of Documents Forecast to be Submitted	Expected Rate of Electronic Documents Submitted	Shipping and Handling Costs (each package) ¹	Total Annual Shipping Cost Savings
----------------------------------------------	-------------------------------------------------	-------------------------------------------------	---------------------------------------------------------	------------------------------------

Manuals Submitted Electronically	18	0.9	\$15.84	\$256.61
Manuals Submitted in Printed Form		0.1	\$14.90	\$26.82
Amendments Submitted Electronically	42	0.9	\$13.18	\$498.20
Amendments Submitted in Printed Form		0.1	\$13.18	\$55.36
Inadequate Manuals Submitted Electronically	18	0.27	\$15.84	\$76.98
Inadequate Manuals Submitted in Printed Form		0.03	\$14.90	\$8.05
Inadequate Amendments Submitted Electronically	42	0.14	\$13.18	\$77.50
Inadequate Amendments Submitted in Printed Form		0.02	\$13.18	\$11.07
TOTAL				\$1,010.59
¹ It should be noted that this is the cost per document set, not per document. For example, in the first row, when manuals are submitted electronically, the cost of producing and mailing two documents would be saved (\$15.84). In the second row, when a document is submitted in printed format, the cost of producing and mailing only one document would be saved (\$14.90). All numbers in this column are from table 9.				

Table 13: Annual MTR Facility Shipping and Handling Cost Savings

MTR Facility Shipping Cost Savings From:	Instances of Documents Forecast to be Submitted	Expected Rate of Electronic Documents Submitted	Shipping Costs (each package ¹)	Total Annual Shipping Cost Savings
Manuals Submitted Electronically	261	0.75	\$18.74	\$3,668.36
Manuals Submitted in Printed Form		0.25	\$17.80	\$1,161.45
Amendments Submitted Electronically	442	0.75	\$15.71	\$5,207.87
Amendments Submitted in Printed Form		0.25	\$15.71	\$1,735.96
Inadequate Manuals Submitted Electronically	261	0.23	\$18.74	\$1,124.96
Inadequate Manuals Submitted in Printed Form		0.08	\$17.80	\$371.66
Inadequate Amendments Submitted Electronically	442	0.11	\$15.71	\$763.82

Inadequate Amendments Submitted in Printed Form		0.04	\$15.71	\$277.75
TOTAL				\$14,311.83
¹ All numbers in this column are from table 9.				

In tables 14 and 15, we show the cost savings to facilities that maintain required documentation at marine transfer areas in electronic format.⁹⁰ These savings stem from assembling fewer Operations Manuals and Emergency Manuals.⁹¹ According to Coast Guard SMEs, a facility typically has two marine transfer areas. Each facility is currently required to keep a copy of their manuals at each marine transfer area in printed format, as the regulations that established this requirement were published before it was commonly accepted practice (or even possible) to access electronic records in a portable fashion.

Coast Guard SMEs projected that LNG/LHG facilities have a 50-percent likelihood of storing their manuals and amendments in electronic format at marine transfer areas, and MTR facilities have a 20-percent likelihood of storing them electronically.

The reason these percentages are low is because the adoption of electronic documents at these areas requires a facility to already be equipped to access electronic documentation at marine transfer areas.⁹² The cost of purchasing the new IT equipment for these purposes greatly offsets the cost savings from using electronic documentation, as facilities must have the necessary IT infrastructure in place to experience the cost savings. As LNG/LHG facilities are typically more capital-intensive and modernized in terms of IT infrastructure than MTR facilities, they are more likely to use electronic documentation.

As stated previously, the costs to assemble manuals and amendments for

⁹⁰ This electronic documentation will be accessed via a device such as an electronic tablet.

⁹¹ LNG/LHG facilities must have Operations Manuals and Emergency Manuals at these locations, and MTR facilities have Operations Manuals only.

⁹² For example, through Wi-Fi or hardwire connection.

LNG/LHG facilities was \$9.50 and \$1.69 (each).⁹³ Additionally, we have estimated the affected population for LNG/LHG facilities at 18 for manuals and 42 for amendments.⁹⁴ Multiplying these numbers with an average of two marine transfer areas per facility resulted in the annual production cost savings figures shown in table 14.

Table 14: Annual LNG/LHG Facility Production Cost Savings for Marine Transfer Areas

Marine Transfer Area Cost Savings:	Instances of Documents per Year	Electronic Document Use at Marine Transfer Areas	Marine Transfer Areas per Facility	Production Costs (each)	Annual Production Costs Savings
Manuals	18	50%	2	\$9.50	\$171.00
Amendments	42	50%	2	\$1.69	\$70.98
TOTAL					\$241.98

As stated previously, we estimated the costs to assemble manuals and amendments, for MTR facilities, at \$16.21 and \$2.42 (each).⁹⁵ We have also estimated the affected population at 261 manuals and 442 amendments for MTR facilities.⁹⁶ Multiplying these numbers with an average of two marine transfer areas per facility resulted in the annual production cost savings figures shown in table 15.

Table 15: Annual MTR Facility Production Cost Savings for Marine Transfer Areas

Marine Transfer Area Cost Savings:	Instances of Documents per Year	Electronic Document Use at Marine Transfer Areas	Marine Transfer Areas per Facility	Production Costs (each)	Annual Production Costs Savings
Manuals	261	20%	2	\$16.21	\$1,692.32
Amendments	442	20%	2	\$2.42	\$427.86
TOTAL					\$2,120.18

Cost Savings from Placing Electronic Versions of Operations Manuals at Marine Transfer Areas

In tables 16 and 17, we show the labor cost savings to facilities that choose to

⁹³ See tables 5 and 6 and the discussions accompanying them.

⁹⁴ See discussion under the “Affected Population” section of this RA.

⁹⁵ See tables 7 and 8 and the discussions accompanying them.

⁹⁶ See discussion under the “Affected Population” section of this RA.

retain electronic documents instead of printed documents at marine transfer areas.

According to Coast Guard SMEs, normally a PIC (or someone with a similar background) would place the printed copies at a facility's marine transfer areas. Coast Guard SMEs estimated that it takes an hour to perform this function, due to the size of the facilities. The occupation best corresponding to the role of a PIC in the BLS occupational code series is "First Line Supervisors of Production and Operating Workers" (Occupational Code 51-1011), under NAICS 325000 (Chemical Manufacturing).⁹⁷ We found the mean wage for this occupation to be \$36.07.⁹⁸ We estimated the loaded wage rate to be \$54.47.⁹⁹

Using the estimated loaded labor rate of \$54.47 per hour, multiplied by the affected populations discussed previously under the "Affected Population" portion of this RA (18 manuals for LNG/LHG facilities and 261 for MTR facilities; 42 amendments for LNG/LHG facilities and 442 for MTR facilities) and the estimated rate of electronic document use at marine transfer areas discussed previously (50 percent at LNG/LHG facilities and 20 percent at MTR facilities), we derived the annual labor cost savings shown in tables 16 and 17.

Table 16: Annual LNG/LHG Facility Labor Cost Savings with Respect to Electronic and Operations Manuals (and Amendments) that will not have to be placed at Marine Transfer Areas

Labor of Storing Manuals and Amendments	Instances of Documents per year	Electronic Document Use at Marine Transfer Areas	Labor Costs	Total Annual Labor Cost Savings
Manuals	18	50%	\$54.47	\$490.23
Amendments	42	50%	\$54.47	\$1,143.87
TOTAL				\$1,634.10

⁹⁷ There is no comparable BLS occupational code 51-1011 under the BLS's NAICS 483000 (Water Transportation).

⁹⁸ May 2020 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 325000, (https://www.bls.gov/oes/2020/May/naics3_325000.htm), downloaded April 16, 2021.

⁹⁹ We estimated the loaded rate by accessing the latest available Bureau of Labor Statistics Employer Costs for Employee Compensation News Release (USDLE-21-0437), March 18, 2021 (<https://www.bls.gov/news.release/pdf/ecec.pdf>), referenced April 18, 2021, table 5, page 9. According to this document, for the "production, transportation and material moving" industry, benefits were \$10.92 per hour while wages were \$21.36 (for a ratio of benefits to wages of 51 percent). $\$36.07 + (\$36.07 \times 0.51 = \$18.40) = \54.47 .

Table 17: Annual MTR Facility Labor Cost Savings with Respect to Operations Manuals (and Amendments) that will not have to be placed at Marine Transfer Areas

Labor of Storing Manuals and Amendments	Instances of Documents per year	Electronic Document Use at Marine Transfer Areas	Labor Costs	Total Annual Labor Cost Savings
Manuals	261	20%	\$54.47	\$2,843.33
Amendments	442	20%	\$54.47	\$4,815.15
TOTAL				\$7,658.48

Tables 18 and 19 show the total annual cost savings for LNG/LHG and MTR facilities in both nominal and discounted terms. We found these savings estimates by summing the previous tables for the total number of facilities by respective facility type.

Table 18: Annual Cost Savings for LNG/LHG Facilities on a Nominal Basis and Discounted at 7%

LNG/LHG Cost Savings	Nominal Terms ¹	7% Discounted Rate
Year 1	\$3,465.19	\$3,238.50
Year 2	\$3,465.19	\$3,026.63
Year 3	\$3,465.19	\$2,828.63
Year 4	\$3,465.19	\$2,643.58
Year 5	\$3,465.19	\$2,470.63
Year 6	\$3,465.19	\$2,309.00
Year 7	\$3,465.19	\$2,157.95
Year 8	\$3,465.19	\$2,016.77
Year 9	\$3,465.19	\$1,884.83
Year 10	\$3,465.19	\$1,761.53
Total	\$34,651.90	\$24,338.04
Annualized		\$3,465.19
¹ Sum of tables 16 (\$1,634.10), table 14 (\$241.98), table 12 (\$1,010.59) and table 10 (\$578.52) equals \$3,465.19.		

Table 19: Annual Cost Savings for MTR Facilities on a Nominal Basis and Discounted at 7%

MTR Cost Savings	Nominal Terms ¹	7% Discounted Rate
Year 1	\$35,929.02	\$33,578.53
Year 2	\$35,929.02	\$31,381.80
Year 3	\$35,929.02	\$29,328.78
Year 4	\$35,929.02	\$27,410.08
Year 5	\$35,929.02	\$25,616.90
Year 6	\$35,929.02	\$23,941.02
Year 7	\$35,929.02	\$22,374.79

Year 8	\$35,929.02	\$20,911.02
Year 9	\$35,929.02	\$19,543.01
Year 10	\$35,929.02	\$18,264.49
Total	\$359,290.22	\$252,350.42
Annualized		\$35,929.02
¹ Sum of tables 17 (\$7,658.48), table 15 (\$2,120.18), table 13 (\$14,311.83) and table 11 (\$11,838.53) equals \$35,929.02.		

Table 20 shows the total private sector cost savings.

Table 20: Total Private Sector Cost Savings on a Nominal Basis and Discounted at 7%

Total Private Sector Cost Savings	Nominal Terms	7% Discounted Rate
Year 1	\$39,394.21	\$36,817.02
Year 2	\$39,394.21	\$34,408.43
Year 3	\$39,394.21	\$32,157.41
Year 4	\$39,394.21	\$30,053.66
Year 5	\$39,394.21	\$28,087.53
Year 6	\$39,394.21	\$26,250.03
Year 7	\$39,394.21	\$24,532.74
Year 8	\$39,394.21	\$22,927.79
Year 9	\$39,394.21	\$21,427.84
Year 10	\$39,394.21	\$20,026.02
Total	\$393,942.12	\$276,688.46
Annualized		\$39,394.21

Coast Guard Cost Savings

Under current regulations, the COTP examines the Operations Manuals, Emergency Manuals, and amendments that are submitted by LNG and LHG facilities, and the Operations Manuals and amendments that are submitted by MTR facilities. After examining LNG and LHG documentation, the COTP finds the document either adequate or inadequate. If the document is found adequate, the current regulation requires that “the Captain of the Port returns one copy to the [facility] owner or operator marked ‘Examined by the Coast Guard’.”¹⁰⁰ The same applies to MTR facility documentation. If the document is found to be adequate, the current regulation requires that “the COTP ... return one copy of the manual marked ‘Examined by the Coast Guard’.”¹⁰¹ All these

¹⁰⁰ 33 CFR 127.019(c).

¹⁰¹ 33 CFR 154.300(e).

copies are currently submitted to the COTP by facilities in the form of two printed copies.

Cost Savings from the Option for the COTP to Return Electronic Documents to Facility Operators if Those Documents Were Electronically Submitted

The COTP will return a notification explaining why a given manual does not meet the requirements of the part and any suggested corrections needed to the facilities in either electronic or printed format, depending on the format in which the document was received.¹⁰² In rare cases when there are extensive suggested edits, the COTP may choose to send back a copy of the manual with the corrections noted. If a document was received from a facility in printed format, then it likely will not be returned to the facility in electronic format. As previously stated, Coast Guard SMEs estimated that 90 percent of LNG/LHG facility documents will be received in electronic format, and 75 percent of MTR facility documents will be. We estimated that this is the same percentage the COTP will return to the facilities in electronic format.

The cost savings the Coast Guard will experience from returning electronic responses will be the shipping and handling costs saved by not having to mail back the printed editions of the Operations Manuals, Emergency Manuals, and amendments. The Coast Guard, like the private sector, will likely use a mailing service such as UPS or FedEx Ground shipping. Since the same packages will be returned to the facilities, the Coast Guard's mailing costs will likely be the same as the private sector's. For a 0.5-inch manual, this is estimated to total \$9.25, and for a 5-page amendment, this is estimated to total \$8.23.¹⁰³

Because labor costs differ between the Coast Guard and the private sector, labor-

¹⁰² The regulatory text in title 33 of the CFR (127.019(e), 154.320(c)(2), and 154.325(d) through (e)) states that the COTP will notify the facility with an explanation of why it does not meet this part. The form of the notification will depend on the complexity and/or of the inadequacies that need to be addressed. If there are many that need to be addressed it may prove more logical to return a marked copy of the manual to the facility owner or operator. Some types of inadequacies, for example diagrams, illustrations, and/or maps that may need to be modified may also prove easier to communicate with a manual that is marked, as opposed to a notification.

¹⁰³ Source: table 9.

handling costs do also. The Coast Guard personnel expected to package documents to return to facilities will be either E-4s or E-5s. According to the latest available Commandant Instruction, the fully loaded hourly rate for an E-4 is \$45.00, and for an E-5 \$54.00.¹⁰⁴ We assumed that it takes the Coast Guard the same amount of time to pack and prepare a 0.5-inch manual and a 5-page amendment for shipping as it takes the private sector: 5 minutes, rounded to the closest whole minute, for a 0.5-inch manual, and 4 minutes for a 5-page amendment.^{105, 106} We estimated labor costs at \$3.60 for an E-4 and \$4.32 for an E-5 to mail a 0.5-inch manual.¹⁰⁷ We estimated that it costs \$3.15 for an E-4 and \$3.78 for an E-5 to mail a 5-page amendment.¹⁰⁸ We took an average of the E-4 and E-5 rates, thus deriving an estimated labor cost of \$3.96 per 0.5-inch manual and \$3.47 per 5-page amendment.¹⁰⁹ Thus, the average total cost to mail a 0.5-inch manual is \$13.21, and to mail a 5-page amendment is \$11.70. These costs are summarized in table 21.

Table 21: Coast Guard Shipping and Handling Costs

Shipping and Handling Costs			
	Mailing Costs	Handling (Labor Costs)	TOTAL
Manuals	\$9.25	\$3.96	\$13.21
Amendments	\$8.23	\$3.47	\$11.70

In addition to the documents that have been found adequate, there is the issue of those documents that are deemed inadequate by the COTP. The current regulations require the COTP to notify the facility in writing.¹¹⁰ This notification usually comes in the form of a marked-up copy of the document, showing what needs to be corrected.

¹⁰⁴ Commandant Instruction 7310.1U, dated 27 February 2020, page 2 under the “Hourly Standard Rates for Personnel” section, https://media.defense.gov/2020/Mar/04/2002258826/-1/-1/0/CI_7310_1U.PDF. As of April 19, 2021, this was the latest edition of this document available.

¹⁰⁵ 5 divided by 60 equals 0.08 hours.

¹⁰⁶ 4 divided by 60 equals 0.07 hours.

¹⁰⁷ 0.08 multiplied by \$45 equals \$3.60 and 0.08 multiplied by \$54 equals \$4.32.

¹⁰⁸ 0.07 multiplied by \$45 equals \$3.15 and 0.07 multiplied by \$54 equals \$3.78.

¹⁰⁹ Both of these figures are rounded to the nearest whole cent.

¹¹⁰ 33 CFR 154.320(a)(1) states, “The COTP will notify the facility operator [of an MTR facility] in writing of any inadequacies.” 33 CFR 127.019(d) states, “If the COTP finds that the Operations Manual or the Emergency Manual does not meet this part, the Captain of the Port will return the manual with an explanation of why it does not meet this part [to the LNG or LHG facility].”

This final rule provides the COTP the option to respond electronically or in print to either electronic or printed copies from the facility operators. The COTP will not be obligated to respond in the same format that the manual is submitted.

In summary, the cost savings for the Coast Guard will arise from the reduced number of printed Operations Manuals, Emergency Manuals, and amendments returned to LNG, LHG, and MTR facilities. These savings can be broken out into the labor costs and the shipping costs. Table 22 shows these annual cost saving calculations.

Table 22: Coast Guard Annual Cost Savings from Shipping and Handling Costs Foregone

Cost Savings to the Coast Guard	Instances of Documents per year ¹	Expected Rate of Electronic Documents Production	Shipping and Handling Costs	Annual Cost Savings
LNG/LHG Manuals Submitted	18	90%	\$13.21	\$214.00
LNG/LHG Amendments Submitted	42	90%	\$11.70	\$442.26
MTR Manuals Submitted	261	75%	\$13.21	\$2,585.86
MTR Amendments Submitted	442	75%	\$11.70	\$3,878.55
LNG/LHG Manuals Found Inadequate	18	27% ²	\$13.21	\$64.20
LNG/LHG Amendments Found Inadequate	42	14% ³	\$11.70	\$68.80
MTR Manuals Found Inadequate	261	23% ⁴	\$13.21	\$793.00
MTR Amendments Found Inadequate	442	11% ⁵	\$11.70	\$568.85
TOTAL				\$8,615.52
¹ See tables 12 and 13. ² 90% (percentage of LNG/LHG manuals sent electronically) times 30% (percentage of LNG/LHG manuals found inadequate) equals 27%. ³ 90% (percentage of LNG/LHG amendments sent electronically) times 15% (percentage of LNG/LHG amendments found inadequate) equals 14%. ⁴ 75% (percentage of MTR manuals sent electronically) times 30% (percentage of MTR manuals found inadequate) equals 23%. ⁵ 75% (percentage of MTR amendments sent electronically) times 15% (percentage of MTR amendments found inadequate) equals 11%.				

The summary of these calculations for 10 years is provided in table 23.

Table 23: Coast Guard Costs Savings on a Nominal Basis and Discounted at 7%

Coast Guard Cost Savings	Nominal Terms	7% Discounted Rate ¹
Year 1	\$8,615.52	\$8,051.89
Year 2	\$8,615.52	\$7,525.13

Year 3	\$8,615.52	\$7,032.83
Year 4	\$8,615.52	\$6,572.74
Year 5	\$8,615.52	\$6,142.75
Year 6	\$8,615.52	\$5,740.88
Year 7	\$8,615.52	\$5,365.31
Year 8	\$8,615.52	\$5,014.31
Year 9	\$8,615.52	\$4,686.27
Year 10	\$8,615.52	\$4,379.69
Total	\$86,155.20	\$60,511.81
Annualized		\$8,615.52

¹ In 2020 dollar terms.

Summary of Cost Savings

We show the total cost savings, for both the private sector and government, in nominal and discounted terms, in table 24.

Table 24: Total Cost Savings (Private Sector Plus Government) on a Nominal Basis and Discounted at 7%

Total Private Sector + Coast Guard Cost Savings	Nominal Terms	7% Discounted Rate ¹
Year 1	\$48,009.73	\$44,868.91
Year 2	\$48,009.73	\$41,933.56
Year 3	\$48,009.73	\$39,190.24
Year 4	\$48,009.73	\$36,626.39
Year 5	\$48,009.73	\$34,230.28
Year 6	\$48,009.73	\$31,990.91
Year 7	\$48,009.73	\$29,898.05
Year 8	\$48,009.73	\$27,942.10
Year 9	\$48,009.73	\$26,114.11
Year 10	\$48,009.73	\$24,405.71
Total	\$480,097.32	\$337,200.27
Annualized		\$48,009.73

¹ In 2020 dollar terms.

B. Small Entities

Under the Regulatory Flexibility Act, we have considered whether this final rule will have a significant economic impact on a substantial number of small entities. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The Coast Guard will allow MTR facilities and LNG and LHG facilities to submit

their Operations Manuals, Emergency Manuals, and amendments in electronic format.

These facilities will experience a cost savings. We estimate that this final rule will provide cost savings to 703 MTR facilities, and 60 LNG and LHG facilities.

This final rule will reduce the time and cost burden for regulated LNG, LHG, and MTR facilities to submit Operations Manuals and Emergency Manuals and amendments for the purposes of 33 CFR parts 127, 154, and 156. The final rule enables these facilities to submit the required documentation electronically, enabling facilities to save time associated with mailing and processing printed manuals. In addition, it permits facilities to place electronic copies of their manuals and amendments at their marine transfer areas, resulting in a savings to facilities that choose this route because they will not have to print manuals and amendments and place them physically at those locations.

We examined the LNG/LHG and MTR facility populations separately to provide a detailed analysis. With respect to the LNG/LHG population, we estimate that 54 facilities a year will be impacted by the final rule, or 45 percent of the 121 total number of LNG and LHG facilities.¹¹¹ A search of the MISLE database revealed a total of 85 unique owners for these 121 LNG and LHG facilities.¹¹² Of these unique owners, 15 were found to be small businesses, as defined by the Small Business Administration (SBA) “Table of Small Size Standards.”¹¹³ We were unable to find employee or revenue information for 16 entities. Entities for which data was not available were assumed to be small entities. Assuming that the proportion of owners is directly related to the number of impacted owners, taking 45 percent of the 85 unique owners yields a total of 38 unique

¹¹¹ Of the 60 LNG/LHG facilities, we assume 54 will submit their documentation in electronic format and 6 in print. Of the 703 MTR facilities, 527 are expected to submit their documents in electronic format and 176 in print. See the discussion under the “Affected Population” section of this RA. 54 divided by 121 equals 45 percent.

¹¹² We conducted this search of the MISLE database in mid-December 2020.

¹¹³ As of the latest available SBA “Table of Size Standards” at the time we performed this analysis. That table was effective as of Aug. 19, 2019 and is available at <https://www.sba.gov/document/support--table-size-standards>.

owners who will be affected by the final rule.¹¹⁴ We estimate total nominal cost savings per year for LNG/LHG facilities to be \$3,465 per year, as shown in table 18.¹¹⁵ This totals \$91.18 per owner per year.¹¹⁶ There were no small LNG/LHG facilities for which gross sales data existed for which costs savings exceeded 1 percent of gross revenue.

With respect to the MTR facility population, we estimate that 527 facilities will be impacted per year.¹¹⁷ As we found the total number of MTR facilities to be 2,497, the proportion of impacted facilities is 21 percent.¹¹⁸ Our search of the MISLE database found 1,390 unique owners of all MTR facilities.¹¹⁹ We reduced the 1,390 to a representative sample.¹²⁰ Applying this formula, while assuming a 95-percent confidence interval, yielded a sample size of 385. We base our small business analysis on this sample size.¹²¹ Of the 385 facilities, we estimate that 276 should be considered small. Of those 276 facilities, 145 were small (in terms of either gross sales or number of employees) according to the definition provided by the SBA. Sales and employee data was not available for the remaining 131 facilities, so we assumed that these facilities were also small.

We estimate the total number of impacted unique MTR facility operators at 292.¹²² We estimate the total cost savings, as shown in table 19, to be \$35,929 per year for all MTR facilities per year.¹²³ Hence, we estimate that the projected cost savings per

¹¹⁴ Rounded to nearest whole number. 85 multiplied by 45 percent equals 38.25 (rounded to 38).

¹¹⁵ From table 18, rounded to closest whole dollar.

¹¹⁶ \$3,465 divided by 38 equals \$91.18 per impacted owner per year.

¹¹⁷ See the discussion under the “Affected Population” section of this RA.

¹¹⁸ Rounded to closest whole percentage point (527 divided by 2,497 equals 21.1 percent). This assumes that this ratio, based on historical MISLE data over the past 10 years, remains constant over the future.

¹¹⁹ We conducted this search of the MISLE database in Mid-December 2020.

¹²⁰ We used two equations and then took the higher value, as derived from them, rounded up to the nearest whole number. The two equations are as follows: $[Z^2 * p * q] / (e^2)$ and $(N / [1 + (N * (e^2))])$. Each term in these equations is defined as follows: $Z=1.96$, $e=0.05$, $p=0.5$, $q=0.5$, $N = X$, the relevant number of observations. The application of the two equations yields the following numbers: $[(1.96^2) * 0.5 * 0.5] / (0.05^2) = 310.6$ (rounded to 311) and $1,390 / [1 + (1,390 * (0.05^2))] = 384.16$ (rounded to 385). As 385 is the higher number we select it as our relevant sample size.

¹²¹ We picked the 385 from the 1,390 by assigning the 1,390 a randomly selected number between 0 and 1 using the random number generator in Excel and then picking the first 385 facilities, from highest to lowest, based on the number the random number generator created for each.

¹²² 1,390 multiplied by 21 percent equals 291.9.

¹²³ From table 19, rounded to closest whole dollar.

impacted facility will be \$123.05 per year.¹²⁴ Assuming that the proportion of small facilities among the 292 total impacted facilities reflects the ratio of small facilities in the sample derived by the application of the sample size estimated (72 percent), we estimate a total population of 210 small facilities.¹²⁵ For the 145 small MTR facilities for which gross sales data existed, there were no facilities for which costs savings exceeded 1 percent of gross revenue.

Based on the information provided above, the Coast Guard certifies under 5 U.S.C. 605(b) that this final rule will not have a significant economic impact on a substantial number of small entities.

C. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996, Public Law 104-121, we want to assist small entities in understanding this final rule so that they can better evaluate its effects on them and participate in the rulemaking. The Coast Guard will not retaliate against small entities that question or complain about this final rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1-888-REG-FAIR (1-888-734-3247).

D. Collection of Information

This final rule calls for a revision to two collections of information under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501–3520. As defined in 5 CFR

¹²⁴ \$35,929 divided by 292 equals \$123.05.

¹²⁵ 276 divided by 385 equals 71.7 percent. 292 multiplied by 72 percent equals 210.24.

1320.3(c), “collection of information” comprises reporting, recordkeeping, monitoring, posting, labeling, and other similar actions. The title and description of the collections of information, a description of those who must collect the information, and an estimate of the total annual burden follow. The estimate covers the time for reviewing instructions, searching existing sources of data, gathering and maintaining the data needed, and completing and reviewing the collection.

This final rule changes the collections of information required for waterfront facilities handling LNG and LHG, described in OMB Control Number 1625-0049, and facilities transferring oil or hazardous materials in bulk, described in OMB Control Number 1625-0093. This final rule does not change the content of responses, nor the estimated burden of each response, but decreases the total annual burden for both of these collections of information. The Coast Guard will submit this collection of information amendments to OMB for its review.

Title: Waterfront Facilities Handling Liquefied Natural Gas (LNG) and Liquefied Hazardous Gas (LHG).

OMB Control Number: 1625-0049

Summary of the Collection of Information: LNG and LHG present a risk to the public when transferred at waterfront facilities. Title 33 CFR part 127 prescribes safety standards for the design, construction, equipment, operations, maintenance, personnel training, and fire protection at waterfront facilities handling LNG or LHG. The facility operators must submit Operational Manuals, Emergency Manuals, and amendments to the Coast Guard.

Need for Information: The information in an Operations Manual is used by the Coast Guard to ensure the facility follows proper and safe procedures for handling LNG and LHG and to ensure facility personnel are trained and follow proper and safe procedures for transfer operations. The Emergency Manual is used by the Coast Guard to

ensure the facility follows proper procedures in the event of an emergency during transfer operations. These procedures include actions in the event of a release, fire, or other event that requires an emergency shutdown, first aid, or emergency mooring or unmooring of a vessel. Operations Manuals and Emergency Manuals are updated periodically by amendments to ensure they are kept current to reflect changes in procedures, equipment, personnel, and telephone number listings.

Use of Information: The Coast Guard uses this information to monitor compliance with the rule.

Description of the Respondents: Waterfront Facilities Handling LNG and LHG.

Number of Respondents: This final rule will not have any impact on the number of respondents. Based on the Coast Guard's MISLE database, there are currently 121 LNG and LHG facilities operating in the United States and its territories.¹²⁶ The final rule will reduce the number of hours spent assembling manuals and amendments, submitting them to the COTP, updating numerous copies of each manual that is amended, and ensuring that the most recent version of the manual with all amendments is available to the PIC.

Frequency of Response: The number of responses per year for this final rule will vary by participating facilities. The Coast Guard anticipates that each new participant will submit an Operations Manual and Emergency Manual once when the new facility becomes operational. The operator will submit updates, in the form of amendments, to the manual whenever there is a significant change.

The final rule does not increase the number of annual responses. The number of responses since the last collection of information, however, has increased, because the population size since that time has increased. The most recently approved collection of

¹²⁶ In the most current collection of information, the number of LNG and LNG facilities was 108. The current figure of 121 reflects an increase in this population; it is not due to a change made by the final rule. The relevant collection of information, 1625-0049, can be found in Regulations.Gov (<https://www.regulations.gov/docket?D=USCG-2019-0353>).

information estimates 3,356 annual responses for all LNG and LHG facilities.¹²⁷ Under the final rule, the annual responses are estimated to be 3,502.¹²⁸ This difference is due to a change in the populations as opposed to other impacts of the rulemaking.

Burden of Response: The burden of response will decrease due to the fact that facility operators will no longer need to print the manuals that will be submitted, mail them to the COTP, and place them at the marine transfer areas of the facilities (for those manuals and amendments that will be kept at marine transfer areas in electronic format).

In the latest available collection of information, using the new LNG and LHG population of 121 instead of 108, along with the per-response burden hours in that collection, the total burden hours for both LNG and LHG facilities, per year, is 6,768. The hours per response for the development of an Operations Manual or Emergency Manual is 150 hours, and the hours per response for Operations Manual or Emergency Manual amendments is 2 hours.¹²⁹ The final rule will reduce the burden hours for Operations Manuals and Emergency Manuals and amendments for facility operators submitting their documents to the COTP and storing their documentation at their marine transfer areas in electronic format. This total time saved time is estimated at 33 hours per year. Thus, the Coast Guard estimates that 33 burden hours will be eliminated per year.

Estimate of Total Annual Burden: The final rule will decrease the total burden by 33 hours, from 6,768 hours to 6,735.

Title: Facilities Transferring Oil or Hazardous Materials in Bulk

OMB Control Number: 1625-0093

¹²⁷ Annual responses are defined as not only the number of Operations Manuals and Emergency Manuals and amendments but also other documentation such as letters of intent and declarations of intent. The full list of documents that constitute responses can be found in the collection of information (1625-0049).

¹²⁸ Ibid.

¹²⁹ The relevant collection of information is 1625-0049. The 150- and 2-hour figures can be seen in Regulations.Gov (specifically under <https://www.regulations.gov/docket?D=USCG-2019-0353>), in the supporting document “1625-0049_SS_r0_2019_calcs-sheet_App-A-to-C”, pages 2-3. In that document, it can be seen that the total hours per response, for both LNG and LHG facilities, is 150 hours for development of Operations Manuals and Emergency Manual Amendments and 2 hours for Operations Manual and Emergency Manual amendments.

Summary of the Collection of Information: The Operations Manual regulations in 33 CFR 154.300 through 154.325 establish procedures for facilities that transfer oil or hazardous materials, in bulk, to or from a vessel with a capacity of 39.75 cubic meters (250 barrels) or more. The facility operator must submit Operations Manuals and associated amendments to the Coast Guard.

Need for Information: The Coast Guard uses the information in an Operations Manual to ensure that facility personnel follow proper and safe procedures for transferring oil or hazardous materials and to ensure facility personnel follow proper and safe procedures for dealing with any spills that occur during a transfer. Operations Manuals are updated periodically by amendments to ensure they are kept current to reflect changes in procedures, equipment, personnel, and telephone number listings.

Use of Information: The Coast Guard uses this information to monitor compliance with the rule.

Description of the Respondents: Facilities transferring oil or hazardous materials in bulk.

Number of Respondents: This final rule will not have any impact on the number of respondents. Based on the Coast Guard's MISLE database, there are currently 2,497 oil and hazardous material facilities operating in the United States and its territories. The electronic submission opportunity in this final rule will reduce the number of hours spent printing the manuals and amendments, submitting them to the COTP, updating numerous copies of each manual following amendment, and ensuring the most recent printed version of the manual, with all amendments, is available to the PIC.

Frequency of Response: The number of responses per year for this final rule will vary by participating facilities. The Coast Guard anticipates that each new participant will submit an Operations Manual once when the new facility becomes operational. The operator will submit updates to the manual whenever there is a significant change. Based

on historical information, the Coast Guard expects facilities to submit 261 new Operations Manuals and 442 amendments per year. The number of Letters of Intent submissions is 261, equivalent to the number of Operations Manuals. The current collection of information assumes that the number of Letters of Intent equals the number of Operations Manual submissions. These figures are derived from the MISLE database. Hence, the total number of responses is 964 per year.

Burden of Response: The final rule gives regulated facilities the option of submitting Operations Manuals and associated amendments to the COTP, at their discretion, in either print or electronic format. For those facilities submitting documentation in electronic format, the burden of response will decrease due to eliminating the need to print and mail these manuals. For facility operators placing electronic copies of their documents at their marine transfer areas, costs associated with printing copies and labor time related to placing them there will be saved.

According to the latest collection of information, 115 hours are required to prepare an Operations Manual; 16 hours are required to prepare an amendment; and 2 hours are required to submit a Letter of Intent.¹³⁰ Assuming that there are 261 Operations Manual submissions, 442 amendment submissions, and 261 Letters of Intent, the total of annual burden hours in that collection of information is 37,609.¹³¹

This final rule will reduce the burden hours for facilities because it will permit them to submit their documentation in electronic format and permit them to store their documents at their marine transfer areas in electronic format. The estimated burden hours reduced as a result is 249 hours per year.

Estimate of Total Annual Burden: The final rule will decrease the total burden hours by 249, from 37,609 hours to 37,360 per year.

¹³⁰ OMB Control Number: 1625-0093.

¹³¹ The existing collection of information states that the Letters of Intent submissions equal the number of Operation Manual submissions.

As required by 44 U.S.C. 3507(d), we submitted a copy of the proposed rule to OMB for its review of the reduction in the total annual burden for OMB Control Number 1625-0049. The Coast Guard did not receive any comments on the proposed rule regarding either collection of information request; accordingly no changes have been made. We will submit a copy of the published final rule to OMB for their review and approval of the changes to both existing collections of information. You are not required to respond to a collection of information unless it displays a currently valid OMB control number.

E. Federalism

A rule has implications for federalism under Executive Order 13132 (Federalism) if it has a substantial direct effect on States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under Executive Order 13132 and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132. Our analysis follows.

This final rule amends the Operations Manual and Emergency Manual submission procedures and COTP approval process for facilities that transfer LNG, LHG, oil, or hazardous material, in bulk, to or from a vessel. These changes involve procedural requirements for the Coast Guard's own approval process, safety risk analysis, and appeal process for a facility that transfers LNG, LHG, oil, or hazardous material in bulk. The changes in this final rule do not conflict with State interests. For individual States, or their political subdivisions, any requirements for facilities to submit their Operations Manuals or Emergency Manuals to them for review or approval will be unaffected by this rule.

Pursuant to 46 U.S.C. 70011(b)(1), Congress has expressly authorized the Coast Guard to establish "procedures, measures and standards for the handling, loading,

unloading, storage, stowage and movement on a structure of explosives or other dangerous articles and substances, including oil or hazardous material.” The Coast Guard affirmatively preempts any State rules related to these procedures, measures, and standards (*See United States v. Locke*, 529 U.S. 89, 109-110 (2000)). Therefore, because the States may not regulate within these categories, this rule is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

F. Unfunded Mandates

The Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1531-1538, requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100 million (adjusted for inflation) or more in any one year. Although this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

G. Taking of Private Property

This rule will not cause a taking of private property or otherwise have taking implications under Executive Order 12630 (Governmental Actions and Interference with Constitutionally Protected Property Rights).

H. Civil Justice Reform

This final rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, (Civil Justice Reform), to minimize litigation, eliminate ambiguity, and reduce burden.

I. Protection of Children

We have analyzed this final rule under Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks). This rule is not an economically significant rule and will not create an environmental risk to health or risk to

safety that might disproportionately affect children.

J. Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

K. Energy Effects

We have analyzed this rule under Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use). We have determined that it is not a “significant energy action” under that order because it is not a “significant regulatory action” under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

L. Technical Standards

The National Technology Transfer and Advancement Act, codified as a note to 15 U.S.C. 272, directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with an explanation of why using these standards will be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (for example, specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This final rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

M. Environment

We have analyzed this final rule under Department of Homeland Security

Management Directive 023-01, Rev. 1, associated implementing instructions and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4370f), and have made a determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. A Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the ADDRESSES section of this preamble.

This rule is categorically excluded under paragraphs A3 (part d) and L54 of Appendix A, Table 1 of DHS Instruction Manual 023-01-001-01, Rev. 1. Paragraph A3 (part d) pertains to the promulgation of rules, issuance of rulings or interpretations, and the development and publication of policies, orders, directives, notices, procedures that interpret or amend an existing regulation without changing its environmental effect, and paragraph L54 pertains to regulations which are editorial or procedural. This rule allows facilities that transfer oil, hazardous materials, LNG, or LHG in bulk to submit and maintain the facility Operations Manuals and Emergency Manuals electronically or in print, and amends the COTP examination procedures for those documents, thus enabling electronic communication between the facility operators and the Coast Guard, which will reduce the time and cost associated with mailing printed manuals. This action is consistent with the Coast Guard's port and waterway security and marine safety missions.

List of Subjects

33 CFR Part 127

Fire prevention, Harbors, Hazardous substances, Natural gas, Reporting and recordkeeping requirements, Security measures.

33 CFR Part 154

Alaska, Fire prevention, Hazardous substances, Oil pollution, Reporting and recordkeeping requirements.

33 CFR Part 156

Hazardous substances, Oil pollution, Reporting and recordkeeping requirements, Water pollution control.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR parts 127, 154, and 156 as follows:

PART 127—WATERFRONT FACILITIES HANDLING LIQUEFIED NATURAL GAS AND LIQUEFIED HAZARDOUS GAS

1. The authority citation for part 127 is revised to read as follows:

Authority: 46 U.S.C. 70034; 46 U.S.C. Chapter 701; Department of Homeland Security Delegation No. 00170.1, Revision No. 01.2.

2. Revise § 127.019 to read as follows:

§ 127.019 Operations Manual and Emergency Manual: Procedures for examination.

(a) The owner or operator of an active facility must submit an Operations Manual and Emergency Manual in printed or electronic format to the COTP of the zone in which the facility is located.

(b) At least 30 days before transferring LHG or LNG, the owner or operator of a new or an inactive facility must submit an Operations Manual and Emergency Manual in printed or electronic format to the Captain of the Port of the zone in which the facility is located, unless the manuals have been examined and there have been no changes since that examination.

(c) Operations Manuals and Emergency Manuals submitted after **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** must include a date, revision date or other revision-specific identifying information.

(d) If the COTP finds that the Operations Manual meets § 127.305 or § 127.1305 and that the Emergency Manual meets § 127.307 or § 127.1307, the COTP will provide notice to the facility stating each manual has been examined by the Coast Guard. This notice will include the revision date of the manual or other revision-specific identifying information.

(e) If the COTP finds that the Operations Manual or the Emergency Manual does not meet this part, the COTP will notify the facility with an explanation of why it does not meet this part.

3. In § 127.309, revise the introductory text and paragraph (a) to read as follows:

§ 127.309 Operations Manual and Emergency Manual: Use.

The operator must ensure that—

(a) LNG transfer operations are not conducted unless the person in charge of transfer for the waterfront facility handling LNG has in the marine transfer area a readily available printed or electronic copy of the most recently examined Operations Manual and Emergency Manual. Electronic devices used to display the manuals must comply with applicable electrical safety standards in this part;

* * * * *

4. In §127.1309, revise the introductory text and paragraph (a) to read as follows:

§ 127.1309 Operations Manual and Emergency Manual: Use.

The operator must ensure that—

(a) LHG transfer operations are not conducted unless the person in charge of transfer for the waterfront facility handling LHG has a printed or electronic copy of the most recently examined Operations Manual and Emergency Manual readily available in the marine transfer area. Electronic devices used to display the manuals must comply with applicable electrical safety standards in this part;

* * * * *

**PART 154—FACILITIES TRANSFERRING OIL OR HAZARDOUS MATERIAL
IN BULK**

5. The authority citation for part 154 is revised to read as follows:

Authority: 33 U.S.C. 1321(j)(1)(C), (j)(5), (j)(6), and (m)(2); 46 U.S.C. 70011, 70034; sec. 2, E.O. 12777, 56 FR 54757; Department of Homeland Security Delegation No. 00170.1, Revision No. 01.2. Subpart F is also issued under 33 U.S.C. 2735. Vapor control recovery provisions of Subpart P are also issued under 42 U.S.C. 7511b(f)(2).

6. Amend § 154.300 as follows:

a. Revise paragraph (a) introductory text and add paragraph (a)(4);

b. In paragraphs (b) and (c), remove the word “shall” and add, in its place, the word “must”; and

c. Revise paragraphs (d), (e), and (f).

The additions and revisions read as follows:

§ 154.300 Operations manual: General.

(a) The facility operator of each facility to which this part applies must submit to the COTP of the zone(s) in which the facility operates, with the letter of intent, an Operations Manual in printed or electronic format that:

* * * * *

(4) After **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, includes a date, revision date, or other revision-specific identifying information.

* * * * *

(d) In determining whether the manual meets the requirements of this part and part 156 of this chapter, the COTP will consider the products transferred, and the size, complexity, and capability of the facility.

(e) If the manual meets the requirements of this part and part 156 of this chapter, the COTP will provide notice to the facility stating the manual has been examined by the

Coast Guard as described in § 154.325. The notice will include the date, revision date of the manual, or other revision-specific identifying information.

(f) The facility operator must ensure printed or electronic copies of the most recently examined Operations Manual, including any translations required by paragraph (a)(3) of this section, are readily available for each facility person in charge while conducting a transfer operation. Electronic devices used to display the manual must comply with applicable electrical safety standards in this part;

* * * * *

7. Amend § 154.320 as follows:

- a. Revise paragraphs (a), (b), and (c); and
- b. Add paragraph (e).

The additions and revisions read as follows:

§ 154.320 Operations manual: Amendment.

(a) Using the following procedures, the COTP may require the facility operator to amend the operations manual if the COTP finds that the operations manual does not meet the requirements in this subchapter:

(1) The COTP will notify the facility operator in writing of any inadequacies in the Operations Manual. The facility operator may submit information, views, and arguments regarding the inadequacies identified, and proposals for amending the Manual, in print or electronically, within 45 days from the date of the COTP notice. After considering all relevant material presented, the COTP will notify the facility operator of any amendment required or adopted, or the COTP will rescind the notice. The amendment becomes effective 60 days after the facility operator receives the notice, unless the facility operator petitions the Commandant to review the COTP's notice, in which case its effective date is delayed pending a decision by the Commandant. Petitions

to the Commandant must be submitted in writing via the COTP who issued the requirement to amend the Operations Manual.

(2) If the COTP finds that there is a condition requiring immediate action to prevent the discharge or risk of discharge of oil or hazardous material that makes the procedure in paragraph (a)(1) of this section impractical or contrary to the public interest, the COTP may issue an amendment effective on the date the facility operator receives notice of it. In such a case, the COTP will include a brief statement of the reasons for the findings in the notice. The owner or operator may petition the Commandant to review the amendment, but the petition does not delay the amendment.

(b) The facility operator may propose amendments to the operations manual by:

(1) Submitting any proposed amendment and reasons for the amendment to the COTP in printed or electronic format not less than 30 days before the requested effective date of the proposed amendment; or

(2) If an immediate amendment is needed, requesting the COTP to examine the amendment immediately.

(c) The COTP will respond to proposed amendments submitted under paragraph (b) of this section by:

(1) Notifying the facility operator that the amendments have been examined by the Coast Guard; or

(2) Notifying the facility operator of any inadequacies in the operations manual or proposed amendments, with an explanation of why the manual or amendments do not meet the requirements of this subchapter.

* * * * *

(e) Amendments may be submitted as page replacements or as an entire manual. When an entire manual is submitted, the facility operator must highlight or otherwise annotate the changes that were made since the last version examined by the Coast Guard.

A revision date or other revision-specific identifying information must be included on the page replacements or amended manual.

8. Amend § 154.325 as follows:

a. Remove paragraph (a);

b. Redesignate paragraphs (b) through (g) as paragraphs (a) through (f), respectively; and

c. Revise newly redesignated paragraphs (a) through (d) to read as follows:

§ 154.325 Operations manual: Procedures for examination.

(a) Not less than 60 days prior to the first transfer operation, the operator of a new facility must submit, with the letter of intent, an Operations Manual in printed or electronic format to the COTP of the zone(s) in which the facility is located.

(b) After a facility is removed from caretaker status, not less than 30 days prior to the first transfer operation, the operator of that facility must submit an Operations Manual in printed or electronic format to the COTP of the zone in which the facility is located, unless the manual has been previously examined and no changes have been made since the examination.

(c) If the COTP finds that the Operations Manual meets the requirements of this part and part 156 of this chapter, the COTP will provide notice to the facility stating the manual has been examined by the Coast Guard. The notice will include the date, revision date of the manual, or other revision-specific identifying information.

(d) If the COTP finds that the Operations Manual does not meet the requirements of this part or part 156 of this subchapter, the COTP will notify the facility with an explanation of why the manual does not meet the requirements of this subchapter.

* * * * *

PART 156—OIL AND HAZARDOUS MATERIAL TRANSFER OPERATIONS

9. The authority citation for part 156 is revised to read as follows:

Authority: 33 U.S.C. 1321(j); 46 U.S.C. 3703, 3703a, 3715, 70011, 70034; E.O. 11735, 3 CFR 1971-1975 Comp., p. 793; Department of Homeland Security Delegation No. 00170.1, Revision No. 01.2.

10. Revise § 156.120(t)(2) to read as follows:

§ 156.120 Requirements for transfer.

* * * * *

(t) * * *

(2) Has readily available in the marine transfer area a copy of the most recently examined facility operations manual or vessel transfer procedures, as appropriate; and

* * * * *

Dated: August 3, 2021.

J. W. Mauger

Rear Admiral, U.S. Coast Guard,

Assistant Commandant for Prevention Policy.

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